

AD-A240 469



1

REPORT OF PROCEEDINGS
OF THE
LOW INTENSITY CONFLICT ANALYSIS
WORKSHOP (LICAWS)

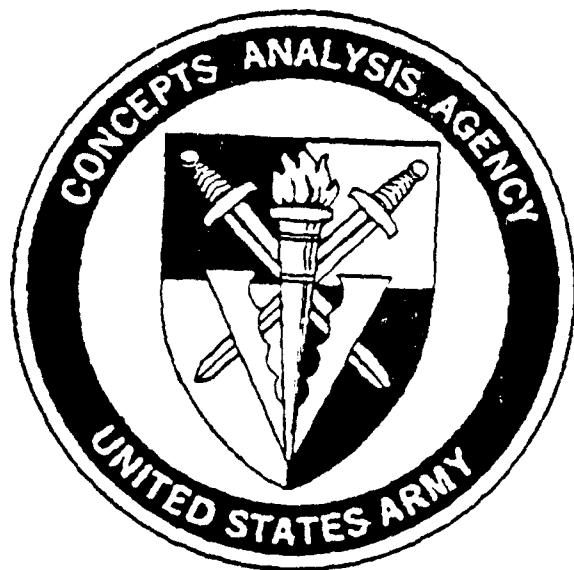
6 - 7 June 1991
Bethesda, Maryland



Cosponsored by

U.S. ARMY CONCEPTS ANALYSIS AGENCY
and
ARMY-AIR FORCE CENTER FOR LOW INTENSITY CONFLICT

This document has been approved
for public release and sale; its
distribution is unlimited.



91 1 22 29

91-08812





DEPARTMENT OF THE ARMY

US ARMY CONCEPTS ANALYSIS AGENCY
8120 WOODMONT AVENUE
BETHESDA, MARYLAND 20814-2797



REPLY TO
ATTENTION OF

CSCA-SPC (5-5d)

26 JUL 1991

MEMORANDUM FOR

MG Robert M. Alexander, HQs USAF/XOX, Washington, DC 20330-5052
BG Thomas W. Montgomery, HQDA, ATTN: DAMO-SS, Washington, DC 20310-0420

SUBJECT: Report of Proceedings, Low Intensity Conflict Analysis Workshop

1. The purpose of this memorandum is to report to you, the Executive Agents for Low Intensity Conflict (LIC), on the LIC Analysis Workshop held at the U.S. Army Concepts Analysis Agency (CAA) on 6-7 June 1991. Cosponsors were CAA and the Army-Air Force Center for Low Intensity Conflict (CLIC).

2. This was the first workshop devoted solely to the analysis of low intensity conflict. The insights contained in Enclosure 1 summarize the workshop results. Working group sessions focused on identifying LIC issues, analytic requirements, and an Army statement of analytic needs.

3. As a forum for operators and analysts, participants came from operator units, military schools, Army and Joint staffs, and analytic agencies. LTG Spigelmire, Commander, U.S. Army Special Operations Command (USASOC), highlighted the workshop with a briefing on Army SOF and their LIC model requirements. The workshop, which included representation from the Air Force Center for Studies and Analyses, facilitated an exchange of perspectives and revealed the difficulties of LIC analysis. An experience from Operation Desert Storm, the transition from active combat to a LIC environment, can suggest this is an opportune time to begin a serious analytic campaign aimed at LIC. We are continuing to refine the issues and the methods to analyze them, and continuing to work with CLIC to determine the feasibility of integrating their studies into the analysis effort. This includes a meeting with LTG Spigelmire to learn what are the most important issues to USASOC. We invite comments from your staffs, along with other members of the community, and would welcome roundtable discussions of this evolving concern.

4. We are currently working on the following minimum actions required.

- a. Formulation of a structured LIC analysis strategy.
- b. Definition of the issues to be analyzed.

26 JUL 1991

SUBJECT: Report of Proceedings, Low Intensity Conflict Analysis Workshop

c. A framework linking the issues to the players, levels of war, and operational system functions.



E. B. VANDIVER III
Director

- 19 Encls
1. Key Insights
 2. LIC Issues
 3. Analytic Requirements
 4. Army Analytic Needs
 5. Welcome Letter
 6. Invitation Letter
 7. Workshop Orientation and Organization
 8. Agenda
 9. Recurring Historical Patterns in LIC
 10. LIC Planning and Strategy Tools
 11. LIC Policy Overview
 12. The Challenge of the Future
 13. The U.S. Army Special Operations Command
 14. Joint SOF Simulation Working Group
 15. LIC Analytic Inventory Overview
 16. Extracts of LIC Models
 17. List of Participants
 18. Distribution
 19. Glossary

| | |
|---------------|----------------|
| Accession For | |
| NTIS CRA&I | ✓ |
| DTIC TAB | |
| Unannounced | |
| Justification | |
| By | |
| Distribution/ | |
| Availability | |
| Dist | Arm Special |
| A-1 | |

STATEMENT A PER TELECON
LTC HARRY GOLDING ARMY CONCEPTS
ANALYSIS AGENCY
BETHESDA, MD 20814-2797
NWW 9/17/91

KEY INSIGHTS

The following paragraphs list and briefly discuss the insights derived from the Low Intensity Conflict Analysis Workshop. It should be remembered that the workshop focus was on analysis of LIC, not LIC itself. Most of the insights reflect that focus. But because LIC is not a mature subject, some entries include discussions on the nature of LIC rather than analytic needs. Additionally, the insights are not listed in any order of priority, except one. If any particular insight could be singled out as more revealing than the others, it would be the first one listed. This is not intended to lessen the importance of the others. However, in order to perform a proper and meaningful analysis, the problem statement must be made very clear. For LIC analysis, this has yet to be done.

1. *It is difficult to define LIC issues to be analyzed.* One cannot simply be asked to "Analyze LIC." That is not an acceptably definitive problem statement. Nor does it lend itself to the derivative essential elements of analysis or distinct measures of effectiveness. LIC issues are not the same as operating categories, type operations, functional areas, task categories, or tasks. The number one requirement for LIC analysis efforts is specific issue definition.

2. *Analysis and models should focus on the LIC operational categories or type operations.* A "one over the world" LIC analysis effort or model is impractical if not impossible. LIC analysis must begin by concentrating on its constituent parts. Problem definers and analysts must focus on specific issues--a type operation, a country, or a purpose. Naturally, some type operations would be easier to analyze, model, and do contingency planning for than others (such as disaster relief compared to hostage negotiations). Once the components are individually manageable, then the whole can begin to be pieced together.

3. *LIC issues need to be organized by the strategic, operational, and tactical levels.* In many instances this is a difficult task. Different organizations plan and operate at different levels, i.e., NSC, CINCS, Army schools and centers, and the individual participating combat and support units. Furthermore, what may be strategic for one entity may be operational for another. A structure should be developed linking the players (Army, Marines, DOD, JCS, executive branch, etc.), the levels (strategic, operational, and tactical), and the functions (force development, combat developments, training, operations, etc.) to the issues that could lead to analysis. Along these lines, the TRADOC Directorate of Army Doctrine is already working to incorporate LIC functions into the Blueprint of the Battlefield.

4. *LIC is an interagency endeavor, but our analysis efforts must focus on the Army responsibilities.* This presents a tenuous balance. In LIC, the interagency and joint perspective cannot be overemphasized. But neither DOD nor the Army is or should be the lead agency. In fact, in a comprehensive LIC plan, the military role is small. Political, economic, and cultural considerations may far outweigh the military contributions in a particular situation. So then, Army-oriented analysis must be viewed as an integral component of a larger role. The Army analysis cannot be rigorous and useful without nonmilitary and sister service input. Further, LIC is such a large subject that it

cannot all be analyzed in one study effort, even for a single country focus (see insight number 2). Army analysis must consider the external factors, but must focus on Army issues and involvement.

5. *One LIC leader must publish specific guidance.* This insight follows from the previous one. A clearly defined chain of command with specifically designated duties and responsibilities is the goal. The comment is directed toward both the interagency community and the Army component, from the highest to lowest levels. The published guidance would include organizations, functions, and interrelationships. Some would say this structure already exists. Others would argue the current organization is inefficient and requires mending. Regardless, the intent of the insight is for a commonly perceived clear division of responsibilities, mutual understanding, and the willingness of all to follow the designated leader.

6. *Analysts must be sensitive to the national strategy and the military plans to support it.* One has to know the master plan in order to determine if the component actions being done (or analyzed) contribute to the desired end state. To determine the effect of a particular action is one thing. To state whether that effect is a positive contribution to the master plan, and to what extent, is another. This can be taken from another point of view, the bottom-up approach. Those on the ground in a LIC environment and those doing the detailed work need to understand the overall strategy and plans to support it. They will understand the micro scene more clearly than those higher up. Their responsibilities include reporting what they see and what they think based on what they know and making recommendations. This input is necessary to the decisionmaking process at the intermediate and highest levels. The more they know about how decisions are made and the impact of their input, the better they can support the process.

7. *We must create a pre-crisis database and identify the "steady state."* Workshop participants came up with the concepts of the pre-crisis database and the steady state as separate entities. Upon further reflection, they may be the same thing looked at from different time horizons. A steady state is the set of base parameters, a database, from which comparisons are to be made. A current state is the same set of input variables with up-to-date data. Current states can be described at any time there is up-to-date data in the data base. Data from a series of current states taken over time yields an observable trend subject to analysis. The goal, or desired end state, can be described by inputting variable values acceptable to the strategists. At any time, the current state and trend can be compared to the desired end state. Trend analysis can derive positive and negative indices, which would lead to strategy and plan refinements. As the level of sophistication increases, additional states may be added and included in the trend analysis, such as neighboring and regional states. A difficulty will be determining and adequately but completely defining the characteristic factors of the steady state. These would include political, military, economic, and cultural factors, all of which could be aids to predictive analysis. The level of effort required to validate and keep the database up-to-date is another consideration.

8. *We must first adequately define the issues before designing the models.* There are models available now. But they often do not address the specific issue or issues we want to examine. We should hesitate before using those models

and ask if the answers they will give us is really what we want. We must fit a model to a problem/issue, not the other way around.

9. *Models must represent multiple aspects and levels of the state.* Multiple aspects include the political, military, economic, and socio-cultural factors of the modeled state. Multiple levels implies the various strata of society (upper class through peasants), government bureaus (both the strata and the different branches), the various economic forces in the country along with their individual influences on government and society, and the like. An extremely important point is that regional and cultural uniquenesses must be recognized. Just a couple examples are population or religious minorities, the attitude that economic status quo is acceptable, and that certain levels of government corruption are not wrong.

10. *Models need more than two sides.* The number of key players in a LIC environment is more than in a conventional war. Conventional war can be adequately modeled using the blue and red sides with their inherent combat, combat support, and combat service support capabilities. The level of nonmilitary popular support is not an issue. LIC is not so easily portrayed. LIC is not solely the government versus the insurgents, a simplified blue versus red. Both sides vie for the support of at least one other group which yields degrees of power, like the undecided and nonaligned population. The minimum number of sides in a representative LIC model is open for discussion. Some say three, some say five, and some do not know how many; but it is not two. Suffice it to say that LIC models need to be able to model multiple sides as determined by the situation.

11. *Perseverance must be embedded in everything.* The time horizons in a LIC environment are far greater than in conventional combat. Politicians are probably more attuned to this thought than analysts. As LTG Spigelmire pointed out, in war the focus is on measurable results, in conflict it is on subjective results, and in peacetime competition the focus is sustained progress. The action-to-results duration time is usually protracted in LIC. Feedback will probably be slow in coming and difficult to measure. Discernible impacts of some actions may be years in the making.

12. *With our automation capabilities, we should make an effort to forecast events.* The point is self explanatory. Given that we can forecast events, we then can establish a posture, select an appropriate response, design the force packages, and respond in the proper sequence. If effectively done, this predictive capability decreases planning time, increases reaction time, and should enhance execution.

13. *Senior level mainstream decisionmaker and analyst involvement is necessary.* Because LIC analysis is immature and ill-defined, senior level analyst involvement is needed to bring it to a higher level of visibility and emphasis. That increased attention will bring more and better minds to bear on the issues, thus more and better analysis and support to LIC decisionmakers.

14. *Capture the lessons of history.* It was perhaps surprising, at least gratifying, the extent to which the workshop participants embraced the historical examples and perspectives of LIC. Historical records and understanding the cause-and-effect relationship of past events can contribute

to both the current study of LIC and predictive efforts. Also not to be forgotten is to make use of the Center for Army Lessons Learned.

15. *Continue incorporation of LIC analysis into the AR 5-5 and CBRS processes.*

LIC studies will provide useful and important input to the development of plans, programs, and budgets. As more studies are done with greater precision and depth, they will certainly support actions where there is expectation of significant contributions to decisionmaking and policy development. Continued inclusion of LIC studies into the Study Planning Guidance and the Army Study Program would further enhance development of a LIC analysis strategy and expedite the return of credible results.

16. *LIC events, as opposed to strategies, are small and reactive.* LIC strategies and plans may be broad and multifaceted. But the individual events are usually small, cheap, and preemptive in nature. Most LIC events are reactive, responding to a current situation or known objectives of the opposition force. Prevention is the goal, i.e., not allowing the opposition to gain greater influence over the nonaligned or currently supportive groups. Even proactive events have a reactive aspect. By attempting to increase the level of popular support and gain adherents from the nonaligned segment, these actions prevent the opposition from increasing its influence. If models are to be developed, they must be of sufficiently high resolution at this event, or tactical level.

17. *Army training requirements for a LIC environment must be identified.*

Workshop participants were quite aware this is an ongoing effort. Several comments reaffirmed its importance. Traditionally combat-trained soldiers (such as light infantry) may be required to perform in a LIC environment which can be quite different from their primary mission environment. Rules of engagement may change often, even daily. Combat soldiers may have to function more as military police or in a civil disturbance role. The political significance of individual acts is heightened due to military presence in noncombat surroundings and enhanced media exposure. As a result, more LIC training is needed at all levels of the Army training system, from the individual soldier to the higher level decisionmaker.

18. *How do we quantifiably describe the group to whom we give assistance?* We wish to be able to describe their expressed and real contributions to U.S. national goals, their acceptability, stability, capability, and effectiveness. Some balance between the objective and subjective must be reached, with emphasis on the objective. Groups may be as large as the government in place or as small as a dissident faction.

19. *How do we measure progress toward U.S. national goals?* Keep in mind that the struggle is never really over. There is seldom a clear winner or loser. Progress can be observed as progressing toward or away from U.S. goals or stalemated. Measuring the progress, like quantifying and interpreting the senses received by the finger on the pulse, is not nearly so easy. This is especially true when LIC events and their impacts are magnitudinally small, slow to evolve, diverse in scope, and geographically dispersed. The commingling of political, military, social, and economic inputs adds degrees of complexity.

WORKING GROUP RESULTS

MOVE 1 - LIC ISSUES

WORKING GROUP 1

MOVE 1. CHALLENGES FOR LOW INTENSITY CONFLICT (LIC) ANALYSIS

1. Translating general U.S. interests into specific objectives for countries or subregions (strategy development is just evolving).
2. Determining the resource mix most effective to attain objectives, i.e., in a political-military effort, how much should be political and how much should be military?
3. Can we determine a group of "core" things which apply to all categories?
 - a. Imperatives (doctrinal and academic)
 - b. Political reality must be considered
4. Determining thresholds outside of the "steady state" which causes U.S. involvement.
5. What is success in LIC?
6. How do we measure effectiveness?
7. How do we quantify the influence of particular groups in a society?
8. Models are needed for both training and analysis.

WORKING GROUP 2

MOVE 1. WHAT ARE THE ISSUES?

1. Strategic and policy level:
 - a. What functions related to LIC should be done by what government agencies?
 - b. What are the strategic level indicators leading to decisions regarding application of resources in a LIC environment?
 - (1) What is the effectiveness of a government/regime? Can it employ U.S. aid and assistance?
 - (2) Ethics and corruption index
 - (a) relative to country norms?
 - (b) relative to regional norms?

(c) relative to U.S. norms?

(3) What are indicators of success?

2. Operational level: What is the impact of varying combinations of policies, resources/ courses of action, and tactics at the CINC level?

- a. Need for predictive reactive analysis
- b. Need for LIC intelligence preparation of the battlefield (IPB)
- c. Need for up-to-date pre-crisis databases

3. Combat developments/DA/TRADOC/school level:

- a. What force structures and force designs are needed?
 - (1) What do we have - SOF and conventional?
 - (2) What do we need - is there an ideal or objective structure?
 - (3) What is the difference - the delta?
- b. What equipment is needed?
- c. What training is needed?
- d. How do we train conventional forces to support LIC missions?
- e. What is needed to enhance leader education and development?
- f. What scenarios are needed to support LIC analysis?
 - (1) By category of LIC
 - (2) By country
 - (3) By timeframe

WORKING GROUP 3

MOVE 1. LIC ISSUES

1. How to measure success - possibly the military decisionmaker could use a checklist to discern if the political goal is stated with adequate precision.

- a. What end state are we to produce? or, What is the end state and what part is ours?
- b. Who will do the nonmilitary parts?
- c. Who is the lead - the agency, the personality?
- d. Does the decisionmaker have a clearly defined goal (mission)?

- e. Is there connectivity (synergy) of a country policy change on the region?
 - f. Does the decisionmaker have enough information to make a plan and select from alternatives?
2. Need a model of the existing steady state in a country or region (to be able to show the impact of change).
 3. What is the strategic value of an issue (to be able to predict a capability)?
 4. Is it vital to national interests? Does success or failure punch through the threshold of "vital to U.S. interest"?
 5. Need to predict natural disasters and instability. Need to identify the proper response package and sequence.
 6. Need an interoperability / connectivity display.
 7. Feedback must be capable, realistic, and timely.
 8. What are the likely circumstances which a small force will encounter, and can they be included in interactive response play.
 9. Things to consider checklist, with life cycle sequence for each type operation.
 10. Contingency operations in LIC. For example, disaster relief:
 - a. Tools to identify the need
 - b. Tools to identify what is on hand
 - c. Tools to identify the difference (delta)
 - d. Tools to identify solution resources
 11. Force matching: needs versus resources.
 12. Summary: for each LIC category, analytical tools are needed to support:
 - a. Planning / sequencing
 - b. Force packaging
 - c. Sustainment
 - d. Command, control, communications, and intelligence (C3I), i.e., connectivity
 - e. Transition to combat

WORKING GROUP RESULTS

MOVE 2 - ANALYTIC REQUIREMENTS

WORKING GROUP 1

MOVE 2. LIC ANALYTICAL TOOLS

1. Focus analytical resources on the integration of capabilities in nation assistance.
2. Need to cope with subjective nature of the problem.
3. Pairs wise comparison (Delphi).
 - a. Analytic Hierarchy Process
 - b. State of the Art Contingency Analysis (SOTACA)
4. Must address the strategic, operational, and tactical levels of war (operational level currently has the weakest representation).
5. What is the desired/acceptable level of specificity (models and simulations rapidly become data-intensive)?
6. Use benefits from historical perspectives (Computer Assisted Simulation of Conflict (CASCON) from MIT).
7. Use available commercial training programs (CASTELLON).

WORKING GROUP 2

MOVE 2. WHAT IS NEEDED TO IMPLEMENT LIC ANALYSIS?

1. Models must be credible.
 - a. Initial focus on specific categories of LIC, not "one over the world" analysis
 - b. Ensure credibility through validation
 - (1) Historical campaigns or LIC incidents
 - (2) "Classical" theoretical frameworks for insurgency, terrorism, or counterinsurgency
 - c. Models must deal with multiparty conflicts and extensive databases
2. Scenarios must be realistic, reasonable and multi-sided.
 - a. Country specific
 - b. Range of LIC situations and categories

3. Databases must integrate historical, cultural, environmental, political, and military factors.
4. Need to have operational level (CINC) model.
5. It would be useful to have some distribution of responsibilities for analysis between analytical agencies (Concepts Analysis Agency (CAA), TRADOC Analysis Command (TRAC), Army Materiel Systems Analysis Command (AMSAA), Fully Funded Research and Development Centers (FFRDCs)).

WORKING GROUP 3

MOVE 2. ANALYTIC REQUIREMENTS

1. Produce a LIC forum-like Modern Aids to Planning Process (MAPP) suite.
2. Produce life cycle automated planning tools (models).
 - a. To "what if" situations, both near-term and long-term
 - b. To check availability (and feasibility) of resources
 - c. To check compatibility of components (electrical, signal, aircraft versus airfields, etc)
3. A tool for forecasting (predicting) events, such as
 - a. Natural disasters
 - b. Insurgencies
4. Models, databases, information retrieval systems must
 - a. Include cultural and environmental data
 - b. Identify and follow long-term sustainment impact of proposed solutions
5. Model must include roles of all services and non-DOD agencies.
6. Nonautomated Human Resource Expert System.
7. All tools must have an accurate database of subsets and critical nodes for ongoing political, economic, social, and military life in a country or region.
8. Characteristics / capabilities all tools must have:
 - a. Graphical output
 - b. User friendly
 - c. Quick information retrieval
 - d. Interactive realities

WORKING GROUP RESULTS

MOVE 3 - ARMY ANALYTIC NEEDS

WORKING GROUP 1

MOVE 3. IMPLEMENTATION

1. Identify organizations of influence in LIC and analytic support.
 - a. Office of the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict (OASD (SO/LIC))
 - b. U.S. Army Training and Doctrine Command (TRADOC schools and centers)
 - c. Special Operations Command (SOC) and components
 - d. America, Britain, Canada, and Australia (ABCA)
 - e. Pacific Armies Management System (PAMS)
 - f. Foreign Service Institute (FSI)
 - g. Commanders-in-Chief (regional CINCs)
 - h. Intelligence (Central Intelligence Agency, Defense Intelligence Agency, etc)
 - i. Private industry
 - (1) Analytical firms
 - (2) Independent research and development (IR&D)
2. Secure sponsors.
3. Determine operational proponentcy with supporting proponentcy.
4. Determine requirements and priorities.
5. Provide resources and source of resources.

WORKING GROUP 2

MOVE 3. IMPLEMENTATION STRATEGY

1. Get issues raised to the senior analyst, senior staff, and decisionmaker level (HQs TRADOC, HQDA ODCSOPS, DUSA(OR), OSD, PA&E, etc).
2. Get issues into the Concept Based Requirements System (CBRS) and AR 5-5, Army Studies and Analyses, study process.

3. Get mainstream people into LIC discussions and seminars (avoid LIC "Love-ins").
4. Analyze issues by specific requirement (counter-terrorism, counterinsurgency, peacekeeping, contingencies) versus umbrella LIC.
5. Get cost analysts to bring costs of not supporting LIC efforts to senior level attention (foreign aid, trade costs, war costs, debt, jobs, etc).

WORKING GROUP 3

MOVE 3. STRATEGY TO IMPLEMENT ANALYTICAL SUPPORT

1. Develop an automated capability to assess national goals and strategy.
 - a. What is the U.S. national strategy?
 - b. Identify the steady state
2. Develop an automated capability to assess CINC's goals, strategy, and peacetime / LIC campaign plans (if in existence).
3. Develop a world database of economic, political, social, and military factors.
 - a. Select critical elements
 - b. Identify the synergy / interrelationships
4. Identify U.S. government players.
 - a. List areas of responsibility
 - b. List the documents which express strategy, goals, and plans
 - c. Develop a U.S. government interactive process model for policy development and implementation (architecture)
5. Develop interactive force-versus-needs matching packages.
6. The U.S. military is the only U.S. government agency with the wherewithal to accomplish the task of LIC.
 - a. Command and control
 - b. Communications
 - c. Transportation
 - d. Equipment
 - e. Intelligence



REPLY TO
ATTENTION OF:

Office of the Director

DEPARTMENT OF THE ARMY

US ARMY CONCEPTS ANALYSIS AGENCY
8120 WOODMONT AVENUE
BETHESDA, MARYLAND 20814-2797



Dear Low Intensity Conflict Analysis Workshop Participant:

Welcome to the Low Intensity Conflict Analysis Workshop (LICAWS) and thank you for your participation. LICAWS is the first in a series of workshops conducted by the U.S. Army Concepts Analysis Agency's Conflict Analysis Center and the Army-Air Force Center for Low Intensity Conflict. We welcome this opportunity to explore with you the critical issues facing the LIC community and expect to follow this workshop with other political-military games and analyses as a result of your input.

My Conflict Analysis Center has planned the workshop for two days, from 0830 on 6 June to 1500 hours 7 June, with working lunches both days. There are more details enclosed in the following tabs. Again, welcome to LICAWS.

Sincerely,

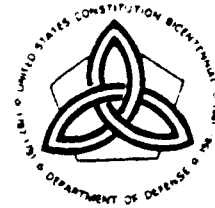
A handwritten signature in black ink, appearing to read "E. B. Vandiver III".

E. B. Vandiver III
Director



DEPARTMENT OF THE ARMY

US ARMY CONCEPTS ANALYSIS AGENCY
8120 WOODMONT AVENUE
BETHESDA, MARYLAND 20814-2797



REPLY TO
ATTENTION OF:

CSCA-SPC (5-5d)

17 MAY 1991

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Low Intensity Conflict Analysis Workshop (LICAWS)

1. U.S. Army Concepts Analysis Agency and the Center for Low Intensity Conflict are cosponsoring the LIC Analysis Workshop. The purpose of this memorandum is to invite your active participation in LICAWS on 6 and 7 June. The workshop will develop and evaluate issues and requirements to produce a Statement of Army Needs in support of LIC decisionmakers.

2. Better defining the role of the analyst in LIC will be an additional by-product of the workshop. This is the first step in a continuing process.

3. I am looking forward to your attendance at this important event. My POC is LTC Harry Golding, DSN 295-1708 or Commercial (301) 295-1708. Details of the workshop are included in the attached sheets of additional information.

E. B. VANDIVER III
Director

6 Encls

1. Additional Information
2. Tentative Agenda
3. Extract Format
4. Extract Example (PANTHER)
5. Map
6. Report of Proceedings, Format

DISTRIBUTION:

OFFICE OF SECRETARY OF DEFENSE (NET ASSESSMENT) ATTN: (LTC METZ)

OFFICE OF SECRETARY OF DEFENSE (SO/LIC) ATTN: (LTC DIEHL)

JOINT CHIEFS OF STAFF, (J-8) ATTN: (LTC BOYD, LTC STARMER)

DEPUTY CHIEF OF STAFF FOR OPERATIONS AND PLANS, DAMO-ODO, ATTN:
(COL LEAVITT)

DEPUTY CHIEF OF STAFF FOR OPERATIONS AND PLANS, DAMO-SSM ATTN: (MR OLSON)

DEPUTY CHIEF OF STAFF FOR OPERATIONS AND PLANS, DAMO-SSP ATTN: (COL INGLE)

U.S. ARMY CORPS OF ENGINEERS ATTN: (MR WADDELL)

CDR, U.S. ARMY TRAINING AND DOCTRINE COMMAND, ATTN: (MS SHERRELL)

U.S. ARMY TRADOC ANALYSIS COMMAND FORT LEAVENWORTH ATTN: (MR KRONDAK)

COMBINED ARMS COMBAT DEVELOPMENTS ACTIVITY, ATTN: (COL KEMPF)

COMBINED ARMS TRAINING ACTIVITY, ATTN: (MR BERNARD, MAJ DE LA PEÑA)

COMMAND AND GENERAL STAFF COLLEGE, ATTN: (DR YATES)

U.S. SOUTHERN COMMAND, ATTN: (LTC BRADFORD, MR BLUTZER)

U.S. ARMY LIC PROPENCY OFFICE, ATTN: (LTC HENDERSON)

U.S. STATE DEPARTMENT, ATTN: (COL GARRITY, LTC GREER)

U.S. AIR FORCE CENTER FOR STUDIES & ANALYSES ATTN: (LTC BRANCH)

File

CSCA-SPC

SUBJECT: Low Intensity Conflict Analysis Workshop (LICAWS)

DISTRIBUTION: (CONT)

NATIONAL DEFENSE UNIVERSITY, ATTN: (MR BEDENBAUGH)

U.S. ARMY WAR COLLEGE, ATTN: (MR MILLER, COL FLAVIN)

U.S. NAVAL WAR COLLEGE, (ATTN: MR HAY)

U.S. ARMY MATERIEL SYSTEMS ANALYSIS AGENCY, ATTN: (COL HULL)

U.S. SPECIAL OPERATIONS COMMAND, ATTN: (CDR WHITE)

U.S. ARMY JFK SPECIAL WARFARE CENTER & SCHOOL, ATTN: (CPT ROBINSON)

U.S. ARMY CENTER OF MILITARY HISTORY ATTN: (DR COSMAS, COL KRAUSE)

CONFERENCE OF AMERICAN ARMIES ATTN: (COL VASQUEZ)

DIRECTOR OF THE ARMY STAFF, POLITICAL ADVISOR ATTN: (MR JONES)

CF:

ARMY-AIR FORCE CENTER FOR LOW INTENSITY CONFLICT, ATTN: (COL DIXON)

ORIENTATION AND ORGANIZATION

1. The Low Intensity Conflict Analysis Workshop (LICAWS) was based on the two themes that the analytic community needs to be able to support LIC operators and decisionmakers, and that LIC operators need to tell the analysts what are their decision support requirements. Keeping those themes in mind (and referring to the accompanying reproduced vignettes), the principal purpose of the workshop was to produce a Statement of Army Analytic Needs in order to support LIC decisionmakers (slide #2). Specific objectives and products of the workshop are listed in slides #3 and 4.

2. The currently accepted definition of LIC (Joint Pub 1-02) and a graphical portrayal of the LIC spectrum were presented as background (slides #5 and 6).

3. Organizationally, the workshop was conducted in segments--a presentation period, three working group sessions (or moves), and a concluding briefback session. The agenda is Enclosure 8. The first morning consisted of presentations made by selected speakers addressing pertinent topics. A synopsis of the briefings and charts used are found in Enclosures 9 through 15 of this report. Participants were divided into three working groups. Each working group was charged with the same mission, specifically to respond to a set of questions (see slide #8). Move one addressed the identification of LIC issues requiring analysis. Move two explored the analytic requirements of those issues, and move three attempted to define a strategy to implement the analytic support of LIC. More specifically, move three objectives were to develop the statement of Army analytic needs and provide key insights. Following moves one and two, the participants reassembled in plenary session to hear the results of each group's discussions. The plenary session following the third move was waived in the interests of time. The afternoon of the second day was devoted to briefing Mr E. B. Vandiver III, Director of Concepts Analysis Agency, on the results of all three working group sessions.

4. The workshop was quite successful in meeting its planned goals. This Report of Proceedings is the physical evidence of the workshop. Less tangible, but still important, products of the workshop also accrued. As an operator and analyst forum, it proved very stimulating and informative. A large number of LIC topics were openly discussed. These topics were spiced with professional and personal flavors leading to many differences of opinion. Agreement was not reached in all areas. It was neither anticipated, expected, nor desired. A LIC analysis strategy, based on the information obtained from the workshop, is being developed. The comments from this workshop provided several alternative strategy development ideas which can be pursued--and will be. All the participant organizations are potential customers for LIC analysis efforts. LIC issues, analytic requirements, the statement of Army analytic needs, and key insights, all products of this workshop are set forth in this report (Enclosures 1 through 4). The identification of LIC models for further evaluation and application will be gleaned from the discussion reports and the model extracts presented as Enclosure 16.

US ARMY

UNCLASSIFIED



LOW INTENSITY CONFLICT ANALYSIS WORKSHOP (LICAWS)

6-7 JUNE 1991

LTCC. HARRY GOLDING
PROJECT DIRECTOR
CSCA-SPC, (301) 295-1596

MR JOHN ELLIOTT
CHIEF
CONFLICT ANALYSIS CENTER

UNCLASSIFIED



PURPOSE OF WORKSHOP

TO DEVELOP A STATEMENT OF ARMY NEEDS IN
ORDER TO SUPPORT LIC DECISIONMAKERS.

OBJECTIVES

- IDENTIFY ARMY ISSUES IN THE LIC OPERATING CATEGORIES.
- IDENTIFY CUSTOMER LIC ISSUES TO BE ANALYZED.
- IDENTIFY LIC ANALYSIS REQUIREMENTS, I.E., DEFINE WHAT ARE THE LIC ANALYSIS PRODUCTS AND HOW THEY WILL BE USED.
- IDENTIFY AN INVENTORY OF METHODOLOGIES TO ANALYZE CUSTOMER NEEDS.
- PRODUCE INSIGHTS INTO LIC ANALYSIS.



WORKSHOP PRODUCTS

- LIC OPERATORS AND ANALYSTS FORUM
- FOUNDATION FOR LIC ANALYSIS STRATEGY
- IDENTIFIES LIC ANALYSIS CUSTOMERS, ISSUES, AND REQUIREMENTS
- IDENTIFIES LIC MODELS FOR FURTHER EVALUATION AND APPLICATION
- REPORT OF PROCEEDINGS



WHAT IS LIC?

A POLITICAL-MILITARY CONFRONTATION BETWEEN CONTENTENDING STATES OR GROUPS BELOW CONVENTIONAL WAR AND ABOVE THE ROUTINE, PEACEFUL COMPETITION AMONG STATES.

IT FREQUENTLY INVOLVES PROTRACTED STRUGGLES OF COMPETING PRINCIPLES AND IDEOLOGIES.

LOW INTENSITY CONFLICT RANGES FROM SUBVERSION TO THE USE OF ARMED FORCE.

IT IS WAGED BY A COMBINATION OF MEANS EMPLOYING POLITICAL, ECONOMIC, INFORMATIONAL, AND MILITARY INSTRUMENTS.

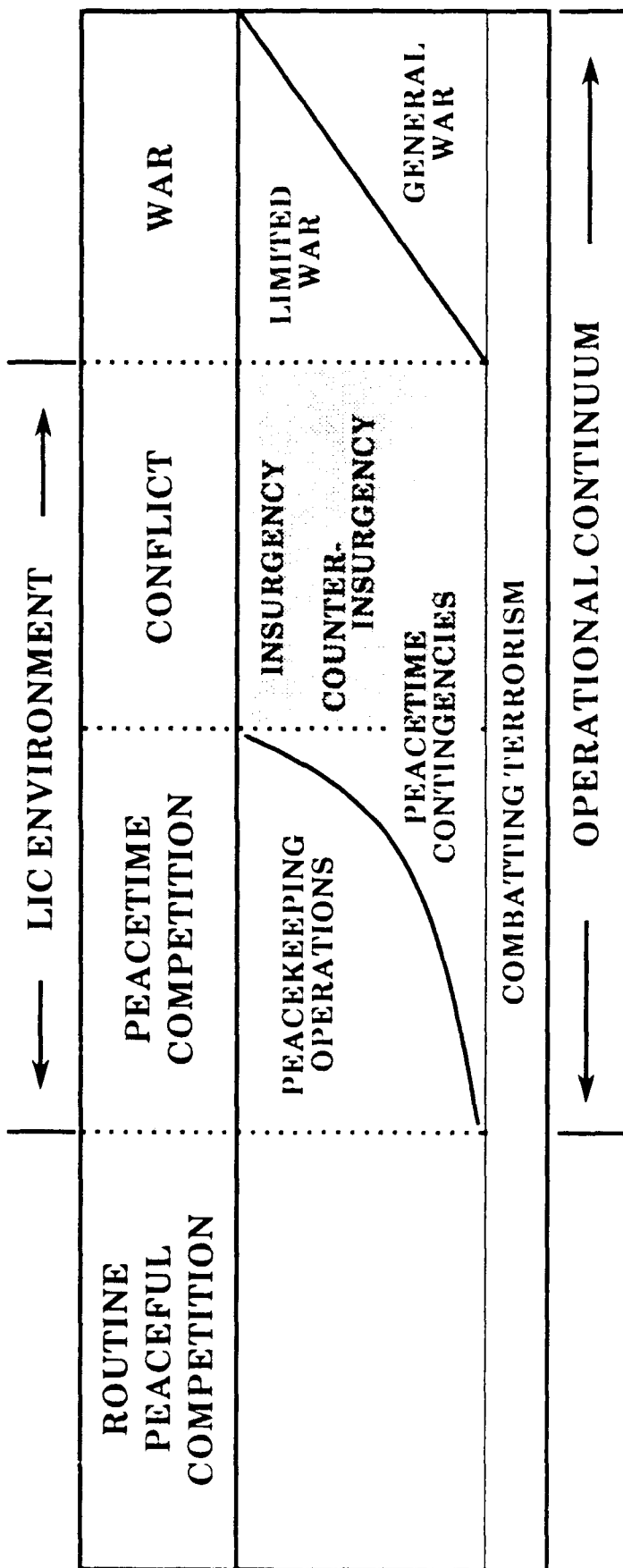
LOW INTENSITY CONFLICTS ARE OFTEN LOCALIZED, GENERALLY IN THE THIRD WORLD, BUT CONTAIN REGIONAL AND GLOBAL SECURITY IMPLICATIONS.

JOINT PUB 1-02, "DEPARTMENT OF DEFENSE
DICTIONARY OF MILITARY AND ASSOCIATED TERMS



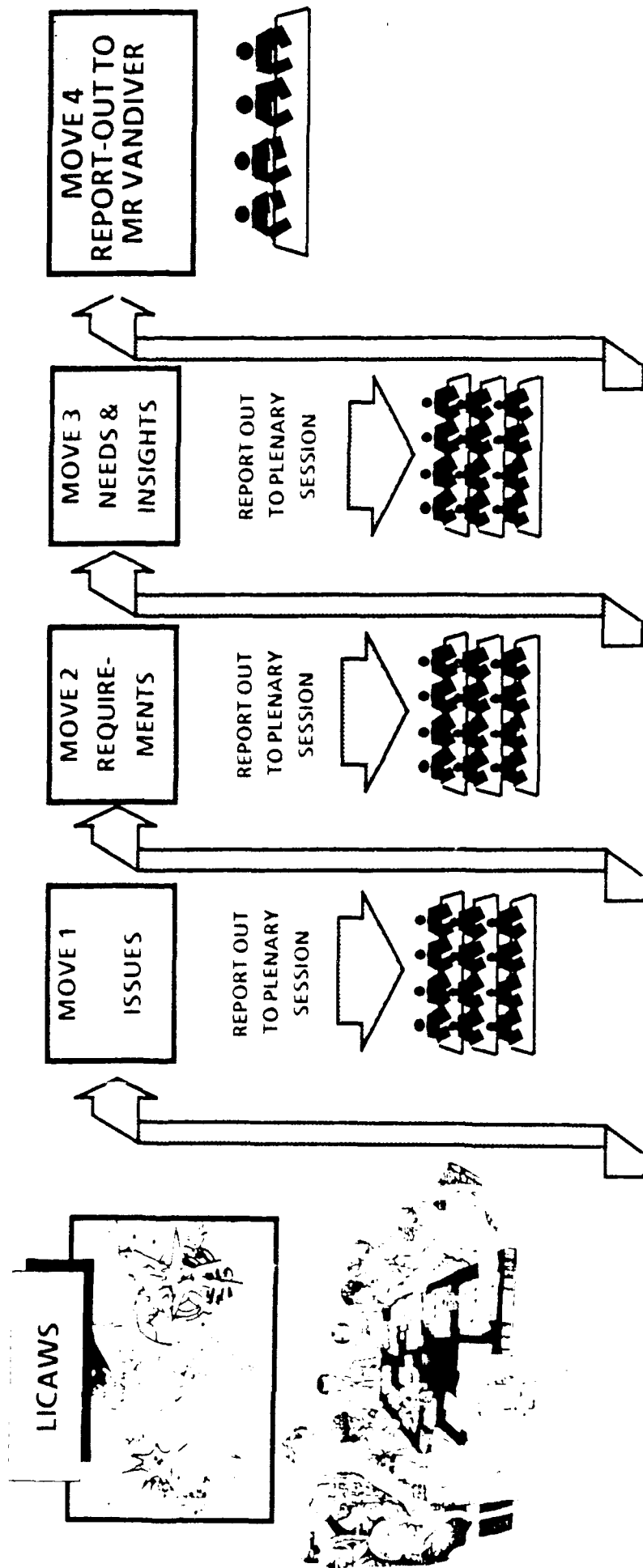
LIC SPECTRUM

(CONCEPTS ANALYSIS AGENCY)



/ FACTIONS /
 / POL-MIL GAMES /
 / HIGH RES CFAW / LOW RES CFAW /

**LICAWS
Methodology**



LICAWS TEAM CHARGES

MOVE 1

1. Identify LIC issues?
2. What are effects of performing or not performing operations in specific LIC categories?
3. What type of LIC categories can be supported by analysis? Unsupportable?
4. What feedback is needed to support LIC decisionmakers?
5. Report results.

MOVE 2

1. How are analysts going to provide needed analytical support?
2. What tools are available? Are they adequate? Can they be modified?
3. Identify necessary modifications.
4. Would integration of organizations benefit LIC analysis? How?
5. Report results.

MOVE 3

1. Define strategy to implement analytical support.
2. What actions are required to implement strategy?
3. Produce insights to be used for LIC analysis.
4. Report results.

MOVE 4

REPORT RESULTS TO
MR. VANDIVER

AGENDA

DAY 1

| | | |
|-----------|---|--------------------------------------|
| 0830-0840 | Welcome by Director, CAA | Mr Vandiver Director, CAA |
| 0840-0850 | Introduction and Orientation | Mr Elliott, Chief, CAC |
| 0850-0900 | Administrative Announcements | LTC Golding, CAC, CAA |
| 0900-0930 | Recurring Historical Patterns in LIC | Dr Yates Combat Studies Inst |
| 0930-1015 | LIC Planning and Strategy Tools | COL Dixon, CLIC |
| 1015-1030 | Policy Overview | MAJ Locke ODCSOPS, DAMO-SSP |
| 1030-1045 | Break | |
| 1045-1115 | Proponency Initiatives | LTC Henderson Proponency Dir, LIC |
| 1115-1145 | Joint SOF Simulation Working Group | COL Roberson, USSOCOM |
| 1145-1300 | Working Lunch, SOF Capabilities and Analytic Needs | LTG Spigelmire CDR, USASOC |
| 1300-1330 | LIC Analytic Inventory Overview | LTC Golding, CAC, CAA |
| 1330-1545 | Working Session 1 - What are the LIC Analytic Issues? | |
| 1545-1630 | Group Results | |

DAY 2

| | |
|-----------|--|
| 0830-1000 | Working Session 2 - What are the LIC Analytic Requirements? |
| 1000-1045 | Group Results |
| 1045-1300 | Working Session 3 - Develop Statement of Army Needs, and lunch |
| 1300-1330 | Group Results |
| 1330-1500 | Group Briefs to Director of CAA, Commander of CLIC, and Chief of Army Proponency for LIC |
| 1500 | Closing Remarks, Mr Vandiver |

SYNOPSIS OF
HISTORY AND LIC: RECURRING PATTERNS IN U.S. INTERVENTIONS

by DR LARRY YATES

1. Dr Yates prefaced his presentations by briefly addressing the value and limits of applied history (slide #1). Succinctly stated, "History will either enlighten you, before or after the fact, or scare the hell out of you."
2. The four U.S. interventions studied were Lebanon (1958), Dominican Republic (1965), Grenada (1983), and Panama (1988-90). The LIC operating categories and missions applicable to each are listed in slides #2 and 3. Three major areas of concern were examined--command and control, planning, and execution.
3. Specific command and control elements of interest are unity of command, relevance of the CINC, conventional units and SOF, and combined operations (slide #4). Each element was elaborated on by using specific examples from the aforementioned interventions. Although the bullet entries on the slides tend to address the negative aspects of operations, Dr Yates did provide several anecdotes of what was done positively, correctly, and expeditiously.
4. Planning elements of interest (slide #9) include that planning time varies, the plan is never perfect, difficulties of joint planning, emphasis on combat operations, and OPSEC. Regardless of the time available for planning (days or years), adaptations will be necessary. Differences among the services continue to hamper totally effective joint planning. Planners still tend to focus on combat operations to the exclusion of considering what will or must happen following combat. OPSEC presents a dilemma in that bringing more key players into the planning process jeopardizes successful execution and may cost friendly lives.
5. Execution elements of interest (slide #10) are combat operations being nonexistent or brief, law and order and stability operations coinciding with combat operations, combat units performing noncombat missions, restrictive and constrictive rules of engagement, and the importance of Military Police, civil affairs, PSYOPS, and civil-military operations.
6. The conclusions presented (slide #12) were that each intervention was successful, but could have been costlier; we must strive for unity of command, but do not expect it; flexibility in planning and adaptability in execution is essential; we need to reexamine LIC doctrine; there is a need for more realistic training in LIC; and we need to provide greater emphasis to LIC in military education. Several subelements and considerable elaboration were given for the need to reexamine LIC doctrine.

THE VALUE AND LIMITS OF APPLIED HISTORY

HISTORY OFFERS NO "LESSONS" BECAUSE EACH EVENT IS UNIQUE

HISTORY BY ITSELF CANNOT PROVIDE COMPLETE ANSWERS TO OPERATORS' QUESTIONS

CURRENT ISSUES CANNOT BE ADDRESSED ADEQUATELY IN A HISTORICAL VACUUM

- o HISTORY PROVIDES KNOWLEDGE AND INSIGHTS
- o HISTORY REVEALS RECURRENT PATTERNS

HISTORY AND LIC:
RECURRING PATTERNS IN U.S. INTERVENTIONS

U.S. INTERVENTIONS

- LEBANON, 1958
- DOMINICAN REPUBLIC, 1965
- GRENADA, 1983
- PANAMA, 1988-1990

APPLICABILITY TO LIC CATEGORIES

- PEACETIME CONTINGENCY OPERATIONS
- PEACEKEEPING
- COUNTERINSURGENCY

RAPIDLY CHANGING MISSIONS

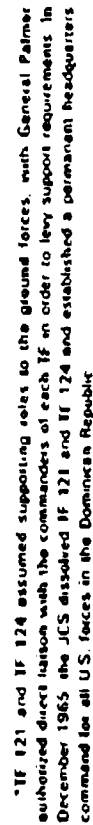
- LEBANON, 1958:
 - COMBAT OPS
 - PEACEMAKING
 - PEACEKEEPING
- DOMINICAN REPUBLIC, 1965:
 - NEO
 - COMBAT OPS
 - PEACEMAKING
 - PEACEKEEPING
- GRENADA, 1983:
 - NEO
 - COMBAT OPS
 - LAW & ORDER/STABILITY OPS
- PANAMA, 1988-1990:
 - SECURITY ENHANCEMENT
 - SHOW OF FORCE
 - ASSERTION OF TREATY RIGHTS
 - COMBAT OPS
 - LAW & ORDER/STABILITY OPS

COMMAND AND CONTROL

- UNITY OF COMMAND
 - o THE PROBLEM OF COMMAND & CONTROL IN GRENADA
 - o WAS GRENADA AN ABERRATION? HAS THE SYSTEM BEEN FIXED?
 - o LAND OPS IN NAVY AOR STILL CONTAINS POTENTIAL FOR CONFUSION
- RELEVANCE OF THE CINC
 - o WASHINGTON'S DEMAND FOR IMMEDIATE INFORMATION
 - o COMMUNICATIONS TECHNOLOGY ALLOWS NCA TO TALK DIRECTLY TO COMMANDERS AT ALL ECHELONS
 - o A CINC NOT ON THE SCENE CAN BE BY-PASSED
 - o A CINC ON THE SCENE CAN BE A CONDUIT FOR INACCURATE INFO:
CROWE TO WOERNER - I CAN'T SEE THE SECDEF WITHOUT INFORMATION
- CONVENTIONAL UNITS AND SOF
 - o SEPARATE JTFs FOR CONVENTIONAL AND SOF IN GRENADA = CONFUSION
 - o JUST CAUSE: JSOTF PLACED OPCON TO JTF-SOUTH
 - o PROBLEMS OF INTEGRATING CONVENTIONAL AND SOF AT OPERATIONAL AND TACTICAL LEVELS
- COMBINED OPS
 - o POLITICAL CONSIDERATIONS MAY REQUIRE U.S. FORCES BE PLACED OPCON TO FOREIGN COMMANDER
 - o DOMINICAN REPUBLIC: LTG BRUCE PALMER'S DILLEMA - FIRST LOYALTY TO U.S. OR FOREIGN SUPERIOR?

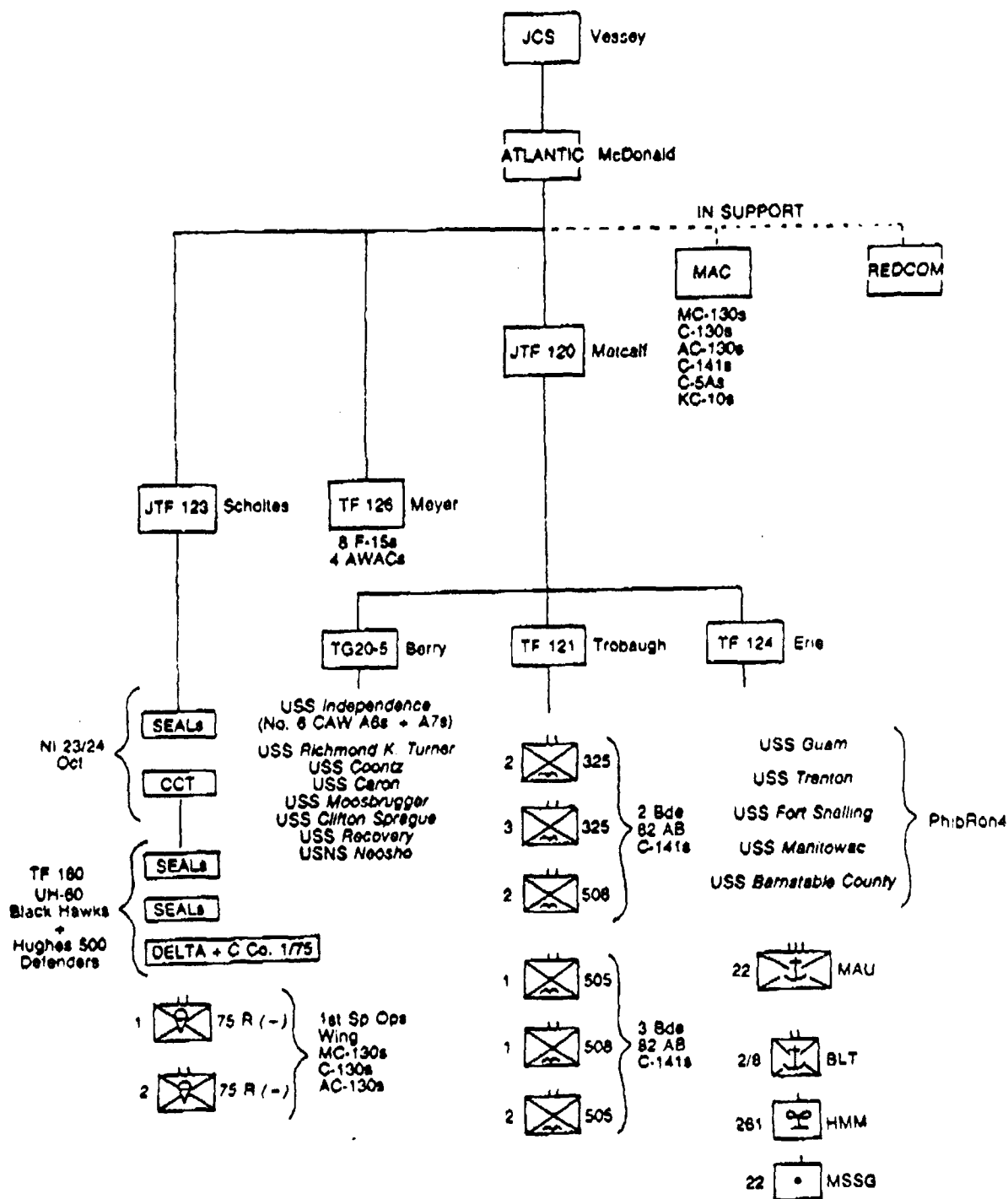


US command relationships. 30 April 1965



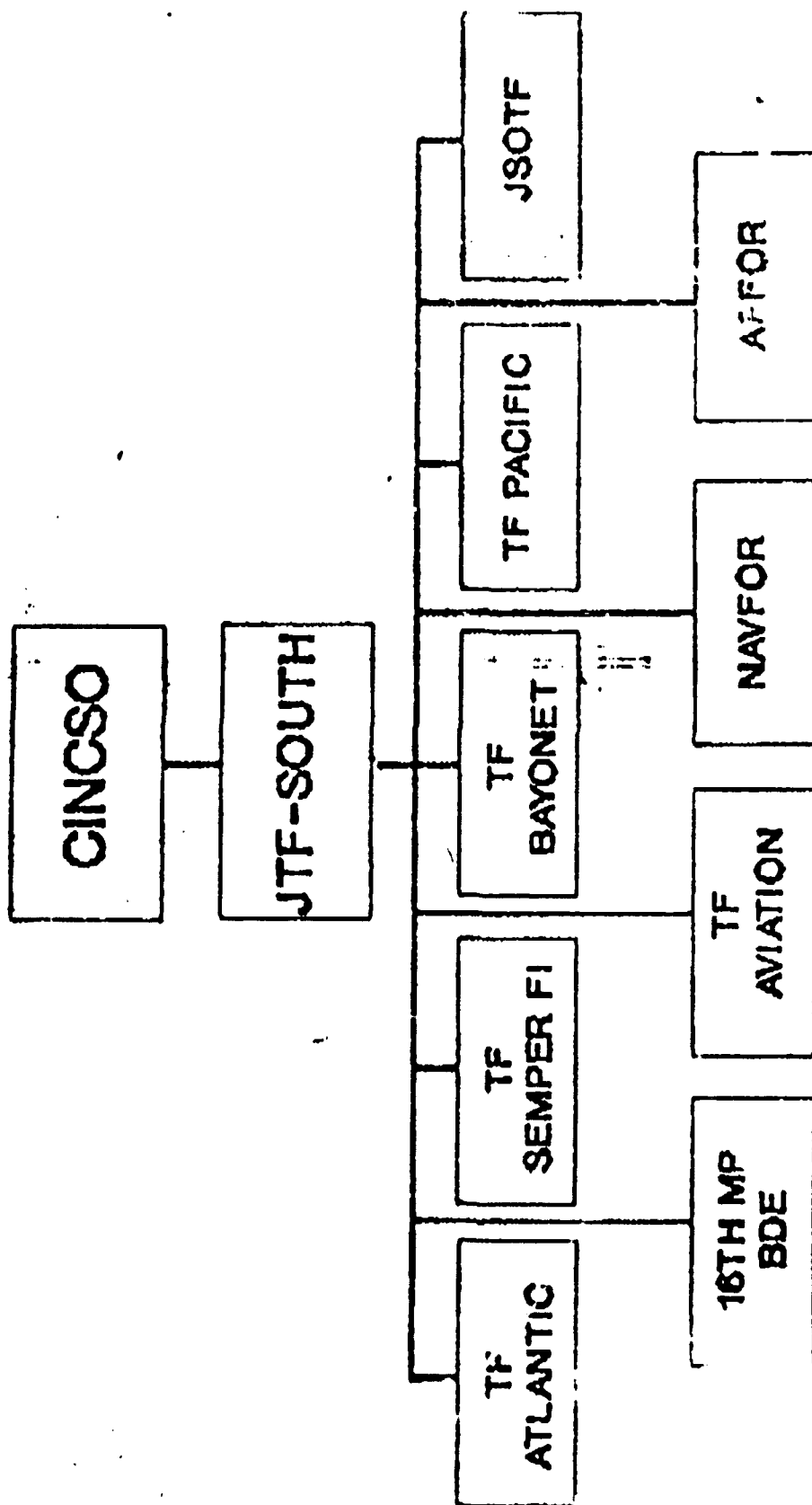
US command relationships: 7 May 1965

Figure 2. U.S. command relationships, 30 April-7 May 1965



ORGANIZATION

JUST
CAUSE



UNCLASSIFIED

PLANNING

- PLANNING TIME VARIES
 - o GRENADA = 4 DAYS
 - o PANAMA = 2 YEARS
- PLAN NEVER PERFECT
 - o OBVIOUS POINT, BUT IN EXECUTION NEED TO EXPECT THE UNEXPECTED
AVOID PANIC, AND ADAPT
- DIFFICULTIES OF JOINT PLANNING
 - o DIFFERENT TRADITIONS, TERMINOLOGY, JARGON, AND METHODS OF
OPERATION AMONG SERVICES CAN LEAD TO DISASTER
 - o TIME AND COORDINATION CAN RESOLVE SOME DIFFERENCES, BUT
TIME AND GOOD WILL NOT ALWAYS ENOUGH TO PRODUCE JOINTNESS
- EMPHASIS ON COMBAT OPS
 - o DOCTRINE AND HISTORICAL RECORD INDICATE THAT COMBAT OPS AND
STABILITY OPS WILL TAKE PLACE SIMULTANEOUSLY
 - o PLANNERS EMPHASIZE COMBAT OPS TO DETRIMENT OF STABILITY OPS
 - o PANAMA: BLIND LOGIC SEEN AS SEPARATE PHASE FROM COMBAT OPS;
PLAN HAD STABILITY OPS OPCON TO CMOTF, NOT JTF-SOUTH
- OPSEC
 - o KEY UNITS AND PERSONNEL THAT WILL EXECUTE PLAN OFTEN EXCLUDED
FROM PLANNING PROCESS
 - o DILEMMA: TO BRING ALL KEY PLAYERS INTO PLANNING JEOPARDIZES
OPSEC; TO EXCLUDE KEY PLAYERS JEOPARDIZES EFFECTIVE EXECUTION
OF PLAN

EXECUTION

- COMBAT OPS NONEXISTANT OR BRIEF
 - o NO COMBAT OPS IN LEBANON, 1958
 - o COMBAT OPS IN DOM REP, GRENADA, PANAMA LASTED 2-4 DAYS
- LAW & ORDER/STABILITY OPS COINCIDE WITH COMBAT OPS
- COMBAT UNITS PERFORM NONCOMBAT MISSIONS
 - o TROOPS EXPECTING TO DEPLOY, CLOSE AND DESTROY, AND REDEPLOY LIKELY TO REMAIN FOR LENGTHY PERIOD CONDUCTING LAW AND ORDER AND STABILITY MISSIONS FOR WHICH THEY ARE MARGINALLY TRAINED
- IMPORTANCE OF MPS, CA, PSYOPS, CMO
 - o PLANNERS RECOGNIZE CRITICAL ROLE OF MPS, CA, PSYOPS, ETC, BUT RARELY GIVE PRIORITY TO THESE UNITS DURING DEPLOYMENT
 - o THAT MANY OF THESE UNITS IN RESERVE AN OBSTACLE TO TIMELY DEPLOYMENT
- RESTRICTIVE AND CONSTRICTIVE RULES OF ENGAGEMENT
 - o DOMINANCE OF POLITICAL CONSIDERATIONS IN LIC INVARIABLY ENTAILS RESTRAINTS AND CONSTRAINTS ON MILITARY OPS
 - o COMBAT UNITS OFTEN TRAIN WITHOUT RESTRAINTS AND CONSTRAINTS
 - o ADAPTING TO CONSTRAINTS CAN BE A AGONIZING PROCESS FOR OFFICERS AND ENLISTED MEN WEDDED TO TRADITIONAL VIEW OF MILITARY OPS

EXECUTION (CONT)

- RAPIDLY CHANGING MISSIONS AND ROE
 - o UNITS INVOLVED IN COMBAT OPS ONE DAY MAY BE DOING CONSTABULARY WORK THE NEXT UNDER COMPLETELY DIFFERENT ROEs
 - o MISSIONS WILL CHANGE AS SITUATION DEVELOPS AND IS REASSESSED
 - o POLITICAL CONSIDERATIONS MAY RESULT IN RAPIDLY CHANGING OR VAGUELY WORDED MISSIONS
 - o THE COMMANDER EXPECTING TO BE GIVEN A PRECISE MISSION THAT WILL DETERMINE MILITARY OPS THROUGHOUT A LIC SITUATION IS INVITING FRUSTRATION
- POLITICAL - MILITARY RELATIONS
 - o THE NCA: WILL OFTEN MAKE DECISIONS BASED ON POLITICAL CONSIDERATIONS WHILE MILITARY OPS ARE UNDERWAY
 - o THE COMMANDER AND THE AMBASSADOR: IN DOM REP, THE AMBASSADOR DETERMINED WHAT MILITARY ACTION WOULD BE TAKEN AND WHEN
 - o THE SOLDIER: THE ACTIONS OF ENLISTED MEN, NCOs, OFFICERS, AND GENERAL OFFICERS ALL HAVE POLITICAL IMPLICATIONS IN MOST LIC SITUATIONS. THE SOLDIER NOT PREPARED TO PERFORM IN A POLITICAL ENVIRONMENT IS NOT PREPARED FOR LIC.
- THE CULTURAL DIMENSION
 - o DOCTRINE EMPHASIZES THE NEED TO UNDERSTAND THE CULTURE OF THE AO.
 - o ETHNOCENTRICISM AN OBSTACLE TO CROSS-CULTURAL COMMUNICATION
 - o U.S. REFORM TYPE PROGRAMS NOT ALWAYS ATTAINABLE IN HOST NATIONS WITH DIFFERENT CULTURES, INSTITUTIONS, ETC.
 - o ASSISTANCE U.S. VIEWS AS STABILIZING AND PROGRESSIVE CAN IN SOME CULTURES BE DESTABILIZING AND COUNTERPRODUCTIVE. E.G., LITERACY AND EDUCATION PROGRAMS CAN HEIGHTEN DISCONTENT WITHIN A COUNTRY.
 - o POLITICAL PROBLEM FOR MILITARY PROGRAMS WHEN AMERICAN PEOPLE EXPECT RESULTS FROM HOST NATIONS THAT AMERICANS HOLD TO HIGHER STANDARDS OF DEMOCRACY AND DEVELOPMENT THAN THEY DO FOR U.S.
 - o DOCTRINE DOES NOT ADDRESS THE DILEMMA THAT IS CREATED WHEN A COUNTRY THAT IS VITAL TO U.S. INTERESTS HAS A CORRUPT, REACTIONARY GOVERNMENT THAT CANNOT ENACT REFORM WITHOUT COMMITTING POLITICAL AND ECONOMIC SUICIDE.

CONCLUSIONS

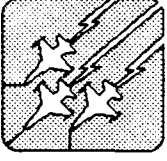
- EACH INTERVENTION SUCCESSFUL BUT COULD HAVE BEEN COSTLIER
 - o IN THE FOUR CASES ANALYZED, U.S. TROOPS DID NOT ENCOUNTER A WELL-ARMED, WELL-TRAINED, WELL-LED, AND DEDICATED OPPONENT
- STRIVE FOR UNITY OF COMMAND, BUT DON'T EXPECT IT
 - o GOLDWATER-NICHOLS SOLVED MANY PROBLEMS, BUT THE POTENTIAL FOR CONFUSION IN COMMAND AND CONTROL STILL EXISTS
- FLEXIBILITY IN PLANNING AND ADAPTABILITY IN EXECUTION ESSENTIAL
- NEED TO REEXAMINE LIC DOCTRINE
 - o CATEGORIES: NOT ALL LIC ACTIONS FIT NEATLY INTO THE DOCTRINALLY APPROVED CATEGORIES; CONFUSION THE RESULT
 - o LIC IMPERATIVES: POLITICAL DOMINANCE, UNITY OF EFFORT, ADAPTABILITY, LEGITIMACY, PERSEVERANCE
 - o POLITICAL DOMINANCE: U.S. MILITARY PERSONNEL AT OPERATIONAL AND TACTICAL LEVELS MUST BE PREPARED TO CARRY OUT DECISIONS BASED ON POLITICAL CONSIDERATIONS
 - o COMMANDERS MUST BE PREPARED TO ADOPT COURSES OF ACTION THAT MAY APPEAR TO BE UNORTHODOX OR OUTSIDE TRADITIONAL WARFIGHTING DOCTRINE. E.G., ROES THAT IMPLICITLY ENSURE A U.S. SOLDIER CANNOT DEFEND HIMSELF AGAINST TRADITIONAL DEFINITIONS OF HOSTILE INTENT; THE "CAMCORD" WARS TO ENSURE RETAINING THE MORAL HIGH GROUND.
 - o UNITY OF EFFORT: MILITARY AND CIVILIAN AGENCIES WORKING TOGETHER IN A CRISIS OFTEN DUPLICATE ONE ANOTHER'S EFFORTS OR DON'T UNDERSTAND EACH OTHER'S CAPABILITIES AND FUNCTIONS.
 - o ADAPTABILITY: IN LIC, AN OFFICER IS BETTER NOT TO THINK IN TERMS OF HOW HE WILL EMPLOY ALL THE CAPABILITIES AT HIS DISPOSAL, BUT RATHER IN TERMS OF HOW HE WILL BE ALLOWED TO EMPLOY THOSE CAPABILITIES.
 - o LEGITIMACY: SHOULD NOT NECESSARILY BE EQUATED WITH WESTERN-STYLE DEMOCRACY
 - o PERSEVERANCE: SHORT-TERM SOLUTIONS MUST SOMETIMES BE REJECTED IN TERMS OF LONG-TERM GOALS. E.G., IN DOM REP, THE U.S. WAS WITHIN HOURS OR MINUTES OF DEFEATING THE REBELS WHEN THE OPERATION WAS CANCELED BECAUSE OF WASHINGTON'S COMMITMENT TO A POLITICAL SOLUTION.
 - o ACTIONS ARE CONSIDERED SUCCESSFUL ONLY WHEN THEY CONTRIBUTE TO LONG-TERM GOALS: COMBAT OPERATIONS CAN OPEN OPPORTUNITIES AS DOM REP, GRENADA, AND PANAMA, BUT IF LONG-TERM STABILITY CANNOT BE ACHIEVED, THE LIVES LOST IN COMBAT CAN BE IN VAIN

CONCLUSIONS (CONT)

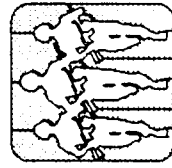
- NEED FOR MORE REALISTIC TRAINING IN LIC
 - o FROM STERILE TO REAL-WORLD ENVIRONMENT: CONSTRAINTS, NONCOMBATANTS
 - o GREATER EMPHASIS ON POLITICAL AND LEGAL FACTORS
 - o TRAINING OF COMBAT UNITS IN NONCOMBAT MISSIONS
- NEED TO PROVIDE GREATER EMPHASIS TO LIC IN MILITARY EDUCATION
 - o LIC NOT HIC AT LOWER LEVEL
 - o READINGS THAT EMPHASIS COMPLEXITY, AMBIGUITY, FRUSTRATIONS, AND POLITICAL REALITIES OF LIC OPERATIONS
 - o REALISTIC EXERCISES
 - o MORE INTERSERVICE EXCHANGES
 - o MANDATORY MILITARY INSTRUCTION FOR FOREIGN SERVICE OFFICERS AND POLICYMAKERS
 - o MANDATORY NATIONAL SECURITY INSTRUCTION FOR MILITARY OFFICERS
 - o GREATER EMPHASIS ON CULTURAL DIMENSION OF LIC

SYNOPSIS OF
LIC PLANNING AND STRATEGY TOOLS
by COL LEE DIXON

1. This briefing provides an overview of the efforts of the Army-Air Force Center for Low Intensity Conflict on three related analytical studies to assist strategy development and resource planning in the area of low intensity conflict (LIC).
2. The first, LIC Assessment Study (LAS), is designed to assess U.S. interests with respect to various world areas and relate them to the likelihood of military operations in a LIC environment in those areas.
3. The second, LIC Instability Indicators (I²) Study, seeks to develop a directory of generic LIC instability indicators which can be used to focus analysis on conditions of instability existing within the LIC operational categories.
4. The third, and final study to be discussed, LIC Planning and Considerations Study (LPCS), is an effort to develop a complete set of planning considerations to identify the critical factors that must be addressed in order to successfully accomplish operations within the four operational categories of LIC.
5. These studies are designed to address LIC issues at strategic/operational and tactical levels of conflict in such areas as counterdrug, counterinsurgency, antiterrorism, and nation assistance activities.



"LIC PLANNING AND STRATEGY TOOLS -- AN OVERVIEW OF THREE CLIC STUDIES"



BACKGROUND

MACRO

- LACK OF CLARITY TO THE ENVIRONMENT
 - NOT A BIG BUDGET/FORCE ITEM
 - NO PREVALENT STRATEGY

THEREFORE

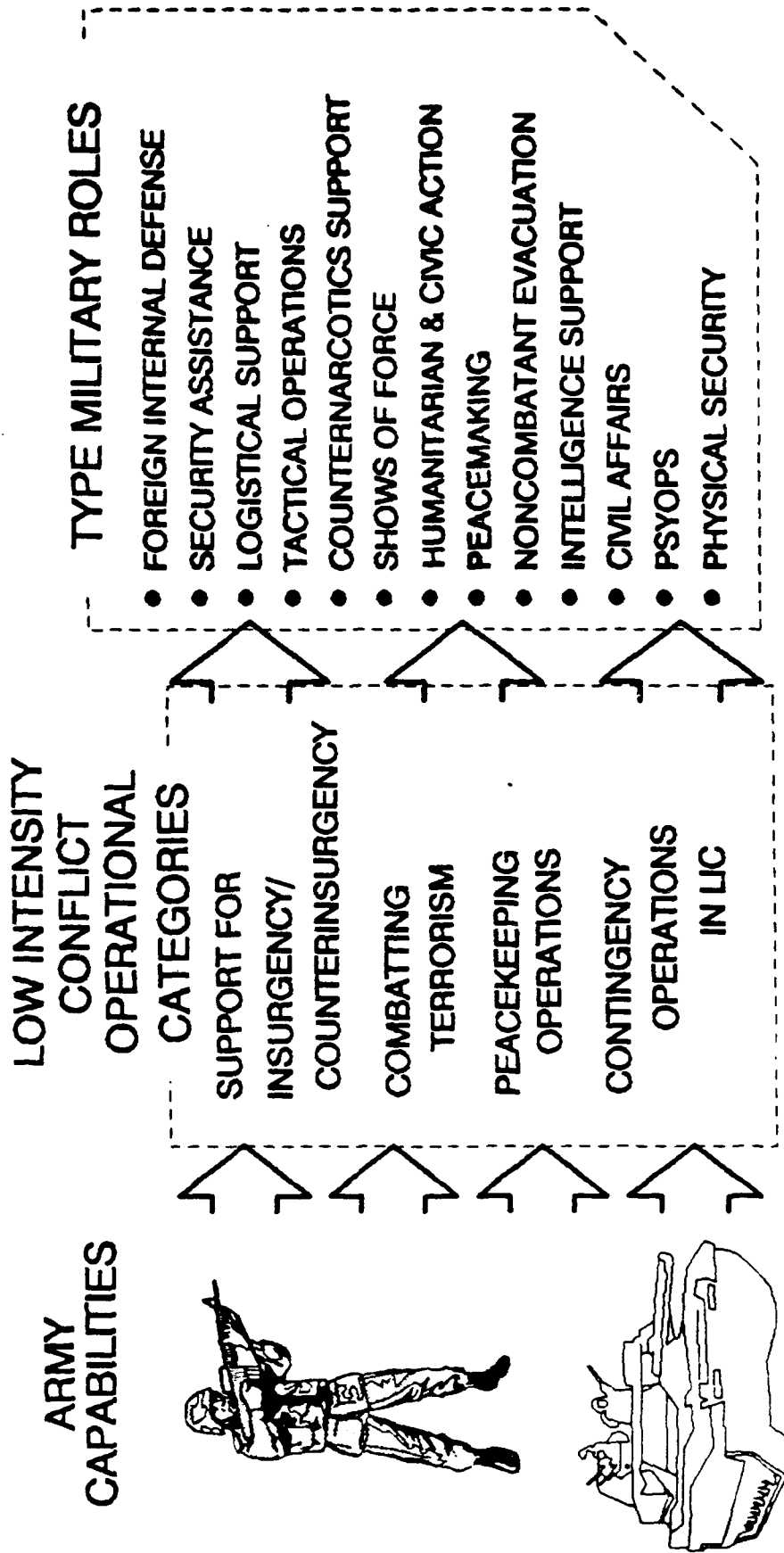
- FOCUSED ON INDIVIDUAL OPERATIONS RATHER THAN OVERARCHING CONCEPT
 - COUNTERDRUG
 - COUNTERINSURGENCY
 - ANTITERRORISM
 - NATION ASSISTANCE

BACKGROUND (Cont)

- **CLIC INVOLVEMENT IN THREE MAJOR STRATEGIES
SUGGESTED NEED FOR STUDIES**
- **CLIC SELF-INITIATED THREE STUDY CONCEPTS
IN OCTOBER TO:**
 - **ADDRESS LIC ISSUES AT STRATEGIC/
OPERATIONAL (AND TACTICAL) LEVELS**
 - **DEVELOP LIC "TOOLS" FOR THE USE BY
PLANNERS/PROGRAMMERS/ANALYSTS**
 - **RECONCILE OPERATIONAL CATEGORIES WITH
REGIONAL NATIONAL INTERESTS AND
PROBABILITY OF OCCURRENCE**
 - **INDICATORS DEVELOPED FROM TWO PERSPECTIVES**



APPLICABILITY OF THE ARMY IN LIC...





APPLICABILITY OF THE ARMY IN LIC ...

ARMY READINESS

PEOPLE & UNITS THAT:

- KNOW HOW TO CONDUCT OPERATIONS
IN A LIC ENVIRONMENT
- HAVE THE RIGHT EQUIPMENT TO
CONDUCT OPERATIONS
IN A LIC ENVIRONMENT

FOR LOW INTENSITY CONFLICT

APPROVED
DOCTRINE

APPROVED
FORCE STRUCTURE

NEW TRAINING
PROGRAMS

MATERIEL
DEVELOPMENTS



APPLICABILITY OF AIR FORCES IN LIC ... MISSIONS

| | Support to Insurgency/ Counter- insurgency | Combatting Terrorism | Peace- keeping Operations | Contingency Operations in LIC |
|----------------------------------|---|-------------------------|---------------------------------|-------------------------------------|
| Surveillance & Reconnaissance | ✓ | ✓ | ✓ | ✓ |
| Airlift | | | | |
| Strategic Theater | ✓ ✓ | ✓ ✓ | ✓ ✓ | ✓ ✓ |
| Special Ops | ✓ | ✓ | | ✓ |
| Air Interdiction | ✓ | ✓ | | ✓ |
| Close Air Support | ✓ | | | ✓ |
| Maritime Ops | ✓ | | | ✓ |
| Counter Air | ✓ | ✓ | | ✓ |
| Strategic Defense | | ✓ | ✓ | ✓ |
| Strategic Offense | | | | |

✓ Likely ✓ Possible ... Predominant Application May be Indirect in LIC

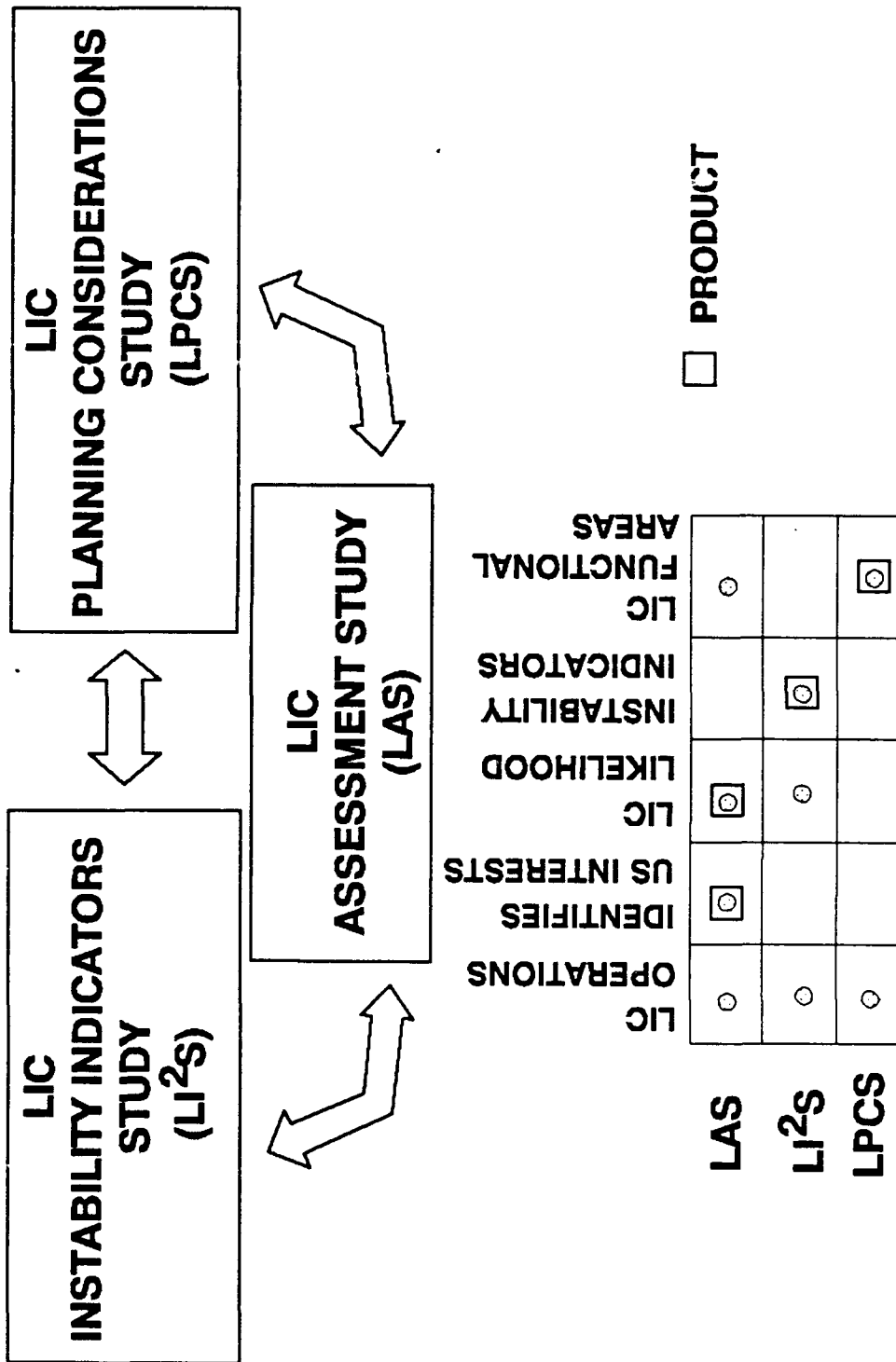


APPLICABILITY OF AIR FORCES IN LIC ... SPECIALIZED TASKS

| | Support to Insurgency/ Counter- insurgency | Combating Terrorism | Peace- keeping Operations | Contingency Operations in LIC |
|-------------------------------|---|------------------------|---------------------------------|-------------------------------------|
| Intelligence | ✓ | ✓ | ✓ | ✓ |
| Warning, C³ | ✓ | ✓ | ✓ | ✓ |
| Logistics* | ✓ | ✓ | ✓ | ✓ |
| Security* | ✓ | ✓ | ✓ | ✓ |
| Rescue/Recovery | ✓ | ✓ | ✓ | ✓ |
| Psychological Ops | ✓ | ✓ | ✓ | ✓ |
| Weather Service | ✓ | ✓ | ✓ | ✓ |
| Aerial Refueling | ✓ | ✓ | ✓ | ✓ |
| Electronic Combat | ✓ | ✓ | ✓ | ✓ |

✓ Likely ✓ Possible * Considered Principles of War but in LIC should be Specialized Tasks

THE STUDIES



LIC ASSESSMENT STUDY

PROBLEM STATEMENT

**THERE IS NO STAFF TOOL SPECIFICALLY DESIGNED TO
ASSESS PRIORITY U.S. INTERESTS WITH RESPECT TO
VARIOUS WORLD AREAS AND RELATE THEM TO THE
LIKELIHOOD OF MILITARY OPERATIONS IN A LOW INTENSITY
CONFLICT IN THOSE AREAS.**

AREA ASSESSMENT -- LIKELIHOOD OF LIC EVENT LIC OPERATIONAL CATEGORY

INSURGENCY
COUNTERINSURGENCY
ANTTERRORISM
COUNTERTERRORISM
PEACEKEEPING OPERATIONS
CONTINGENCY OPERATIONS

| WEST EUROPE | | | | | | | | | |
|----------------------|--|--|--|--|--|--|--|--|--|
| EAST EUROPE | | | | | | | | | |
| EAST AFRICA | | | | | | | | | |
| WEST AFRICA | | | | | | | | | |
| SOUTH/CENTRAL AFRICA | | | | | | | | | |
| SOUTH AMERICA | | | | | | | | | |
| CENTRAL AMERICA | | | | | | | | | |
| NEAR EAST/SOUTH ASIA | | | | | | | | | |
| ARAB STATES | | | | | | | | | |
| EAST/SOUTHEAST ASIA | | | | | | | | | |
| PACIFIC | | | | | | | | | |
| OTHER | | | | | | | | | |

AREA

CENTAM SOUTHAM MIDEAST E.EUROPE AFRICA

5

AREA ASSESSMENT

(REGION VS. US INTERESTS/GOALS)

GOALS

CENTAM SOUTHAM MIDEAST E.EUROPE AFRICA

[illegible]

LIC OPERATING CATEGORIES AND TYPE OPERATIONS

MISSION ASSESSMENT -- CENTRAL AMERICA

U.S. NATIONAL SECURITY STRATEGY GOALS

| | PROTECTION OF US CITIZENS | RECOVERY OF US HOSTAGES | XXXXXXXX | XXXXXXXX |
|--|---------------------------------|-------------------------------|----------|----------|
| I. CONTINGENCY OPERATIONS IN LIC | | | | |
| a. DISASTER RELIEF | | | | |
| b. SHOWS OF FORCE | | | | |
| c. NEO | | | | |
| d. RECOVERY | | | | |
| e. ATTACKS AND RAIDS | | | | |
| f. FREEDOM OF NAV/PROTECTION OF SHIPPING | | | | |
| g. OPERATIONS TO RESTORE ORDER | | | | |
| h. SECURITY ASSISTANCE SURGES | | | | |
| i. DOD SUPPORT TO COUNTERDRUG | | | | |
| j. SUPPORT TO U.S. CIVIL AUTHORITIES | | | | |
| II. ANTITERRORISM | | | | |
| a. INTELLIGENCE | | | | |
| b. SECURITY | | | | |
| III. COUNTERTERRORISM | | | | |
| a. INTELLIGENCE | | | | |
| b. SECURITY | | | | |
| c. HOSTAGE NEGOTIATIONS | | | | |
| d. HOSTAGE RESCUE | | | | |
| e. ASSAULT OPERATIONS | | | | |

LIC INSTABILITY INDICATORS STUDY

PROBLEM STATEMENT

**THERE DOES NOT EXIST A DIRECTORY OF GENERIC LIC
INSTABILITY INDICATORS WHICH CAN BE USED TO FOCUS
ANALYSIS ON CONDITIONS OF INSTABILITY EXISTING WITHIN
THE LIC OPERATIONAL CATEGORIES.**

CONCEPT

THE STUDY WILL IDENTIFY GENERIC LIC INSTABILITY INDICATORS WHICH WILL BE KEYED TO THE FULL RANGE OF SPECIFIED TYPES OF OPERATIONS IN LIC.

IT WILL HELP ANSWER THE QUESTION: WHAT INSTABILITY INDICATORS ARE INHERENT TO A TYPE LIC OPERATION AND SHOULD BE CONSIDERED BY PLANNERS/ANALYSTS.

RESULTS CAN BE USED BY DOD/SERVICE STAFFS IN THE PLANNING/ ANALYSIS PROCESS, AND IN THE DEVELOPMENT OF DOCUMENTS AT THE STRATEGIC, OPERATIONAL AND TACTICAL LEVELS.

METHODOLOGY

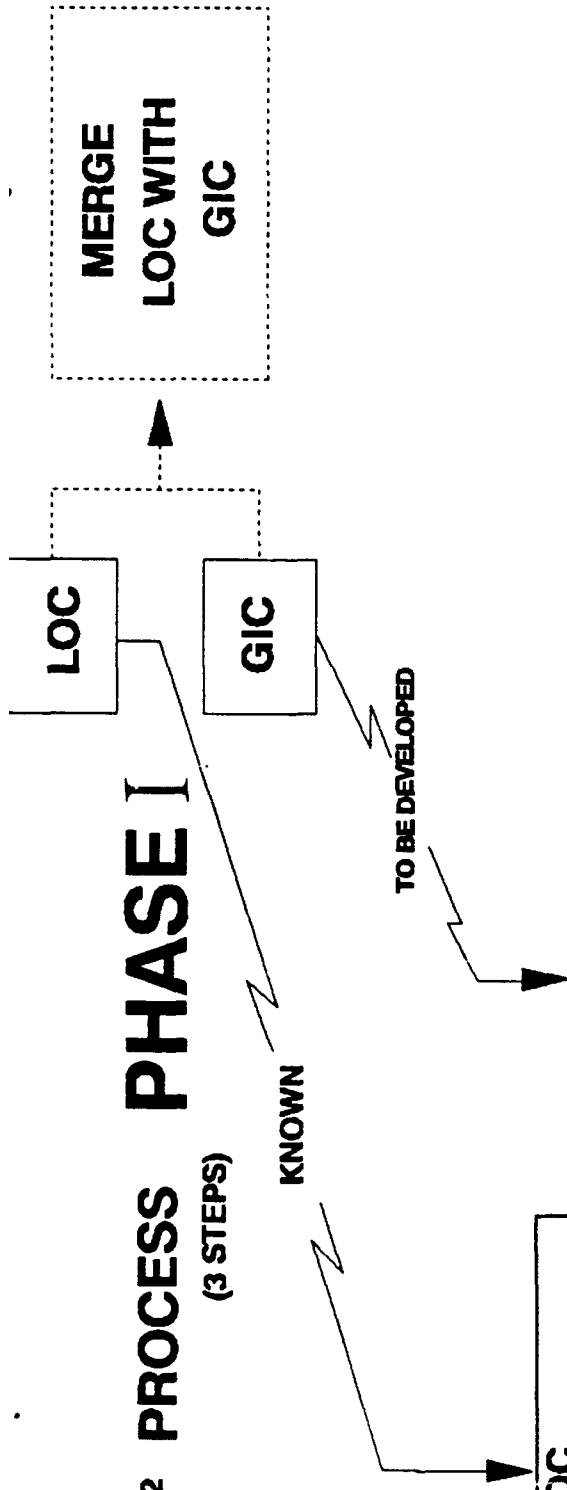
- JOINT PUB 3-07; FM 100-20/AFP 3-20 SERVE AS BASE
- DEVELOP AND CONSOLIDATE LIC INSTABILITY INDICATORS (I²) *
 - DEVELOP GENERIC INSTABILITY CATEGORIES (GIC) **
- MERGE LOCs WITH GICs WITHOUT ANALYSIS
- ANALYZE AND VALIDATE
 - COORDINATE WITH POCs/MODIFY
- DEVELOP MATRIX AND CERTIFY APPLICABILITY
- FINAL COORDINATION WITH POCs/MODIFY
- PUBLISH STUDY

* I² = AN INSTABILITY INDICATOR INHERENT TO A TYPE
OF LIC OPERATION

** GIC = AN ORGANIZED GROUPING OF I²s

LIC - I² PROCESS PHASE I

(3 STEPS)



| LOC |
|-------------------------------|
| ANTITERRORISM |
| INTELLIGENCE SECURITY |
| COUNTERTERRORISM |
| HOSTAGE NEGOTIATIONS |
| ASSAULT OPERATIONS |
| SUPPORT TO INSURGENCY |
| C3 SYSTEMS SUPPORT |
| SUPPORT TO COUNTERINSURGENCY |
| LOGISTICS SUPPORT |
| PEACEKEEPING |
| SUPERVISION OF POW EXCHANGE |
| CONTINGENCY OPERATIONS IN LIC |
| DISASTER RELIEF |

| DEVELOP I ² |
|----------------------------------|
| ANTITERRORISM |
| INCREASED DIGNITARY SURVEILLANCE |
| THEFT OF MILITARY WEAPONS |
| INCREASED MONEY COUNTERFEITING |
| THREATS AGAINST LEADERSHIP |
| INCREASED NATIONALISM |
| ELECTION RIOTS |
| INCREASED DRUG TRAFFICKING |
| COUNTERTERRORISM |
| INTERCEPTED WEAPONS SHIPMENT |
| MARTIAL LAW DECLARATION |
| INCREASED EXPLOSIVE SALES |
| FOUND OPERATIONAL PLANS |
| SUPPORT TO INSURGENCY |
| INTERCEPT FOREIGN COMMUNIQUES |
| DISCOVERY OF SUPPLY CACHES |
| INCREASED MUNITIONS SALES |

| CONSOLIDATE I ² |
|----------------------------------|
| INCREASED DIGNITARY SURVEILLANCE |
| THEFT OF MILITARY WEAPONS |
| INCREASED MONEY COUNTERFEITING |
| THREATS AGAINST LEADERSHIP |
| INCREASED NATIONALISM |
| INCREASED MUNITIONS SALES |
| INCREASED DRUG TRAFFICKING |
| MARTIAL LAW DECLARATIONS |
| DISCOVERY OF SUPPLY CACHES |
| INTERCEPT FOREIGN COMMUNIQUES |

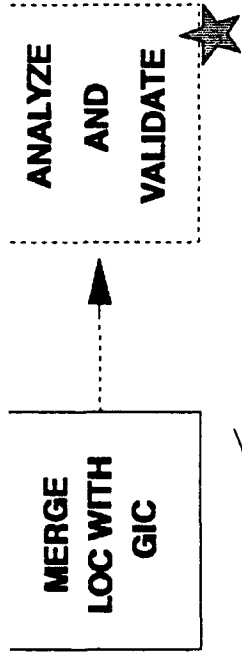
| DEVELOP GIC |
|----------------------------------|
| POLITICAL |
| THREATS AGAINST LEADERSHIP |
| ELECTION RIOTS |
| INCREASED DIGNITARY SURVEILLANCE |
| INCREASED NATIONALISM |
| ECONOMIC |
| INCREASED MONEY COUNTERFEITING |
| INCREASED DRUG TRAFFICKING |
| INTERCEPT FOREIGN COMMUNIQUES |
| RESOURCE/SUPPLY |
| INCREASED MUNITION SALES |
| DISCOVERY OF SUPPLY CACHES |
| THEFT OF MILITARY WEAPONS |

STEP 1

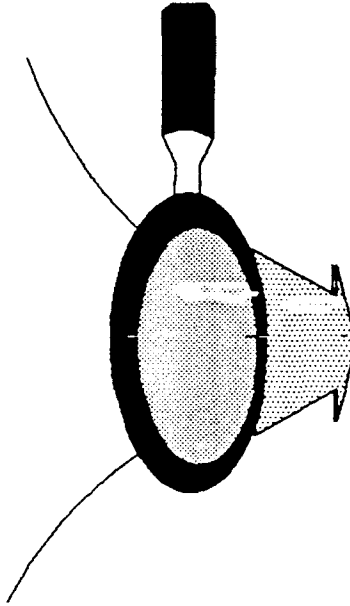
STEP 2

STEP 3

LIC - I² PROCESS PHASE II



| LOC | |
|--------------------------------------|--|
| <u>ANTITERRORISM</u> | |
| INTELLIGENCE | |
| SECURITY | |
| <u>COUNTERTERRORISM</u> | |
| HOSTAGE NEGOTIATIONS | |
| ASSAULT OPERATIONS | |
| <u>SUPPORT TO INSURGENCY</u> | |
| C3 SYSTEMS SUPPORT | |
| <u>SUPPORT TO COUNTERINSURGENCY</u> | |
| LOGISTICS SUPPORT | |
| PEACEKEEPING | |
| SUPERVISION OF POW EXCHANGE | |
| <u>CONTINGENCY OPERATIONS IN LIC</u> | |
| DISASTER RELIEF | |



ANTITERRORISM

INTELLIGENCE

POLITICAL (GIC)

THREATS AGAINST LEADERSHIP
ELECTION RIOTS

ECONOMIC (GIC)

INCREASED MONEY COUNTERFEITING

SECURITY

POLITICAL (GIC)

THREATS AGAINST LEADERSHIP

ECONOMIC (GIC)

INCREASED MONEY COUNTERFEITING

COUNTERTERRORISM

HOSTAGE NEGOTIATIONS

POLITICAL (GIC)

THREATS AGAINST LEADERSHIP



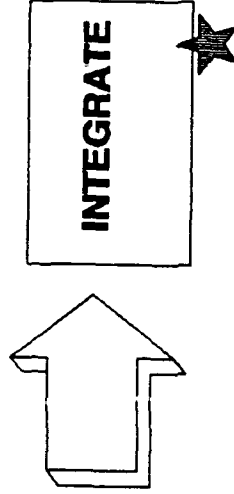
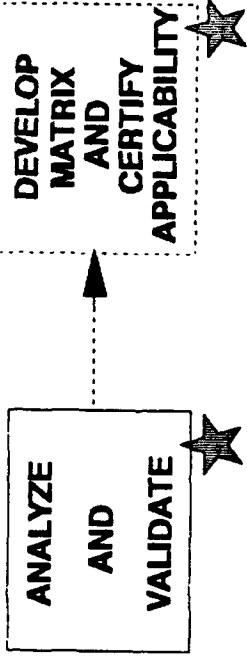
GIC006A

D

| DEVELOPED GIC | |
|---------------------------------|--|
| <u>POLITICAL</u> | |
| THREATS AGAINST LEADERSHIP | |
| ELECTION RIOTS | |
| INCREASED DIGITARY SURVEILLANCE | |
| INCREASED NATIONALISM | |
| <u>ECONOMIC</u> | |
| INCREASED MONEY COUNTERFEITING | |
| INCREASED DRUG TRAFFICKING | |
| INTERCEPT FOREIGN COMMUNIQUE | |
| <u>RESOURCE/SUPPLY</u> | |
| INCREASED MUNITION SALES | |
| DISCOVERY OF SUPPLY CACHES | |
| THEFT OF MILITARY WEAPONS | |

LIC - I² PROCESS PHASE III

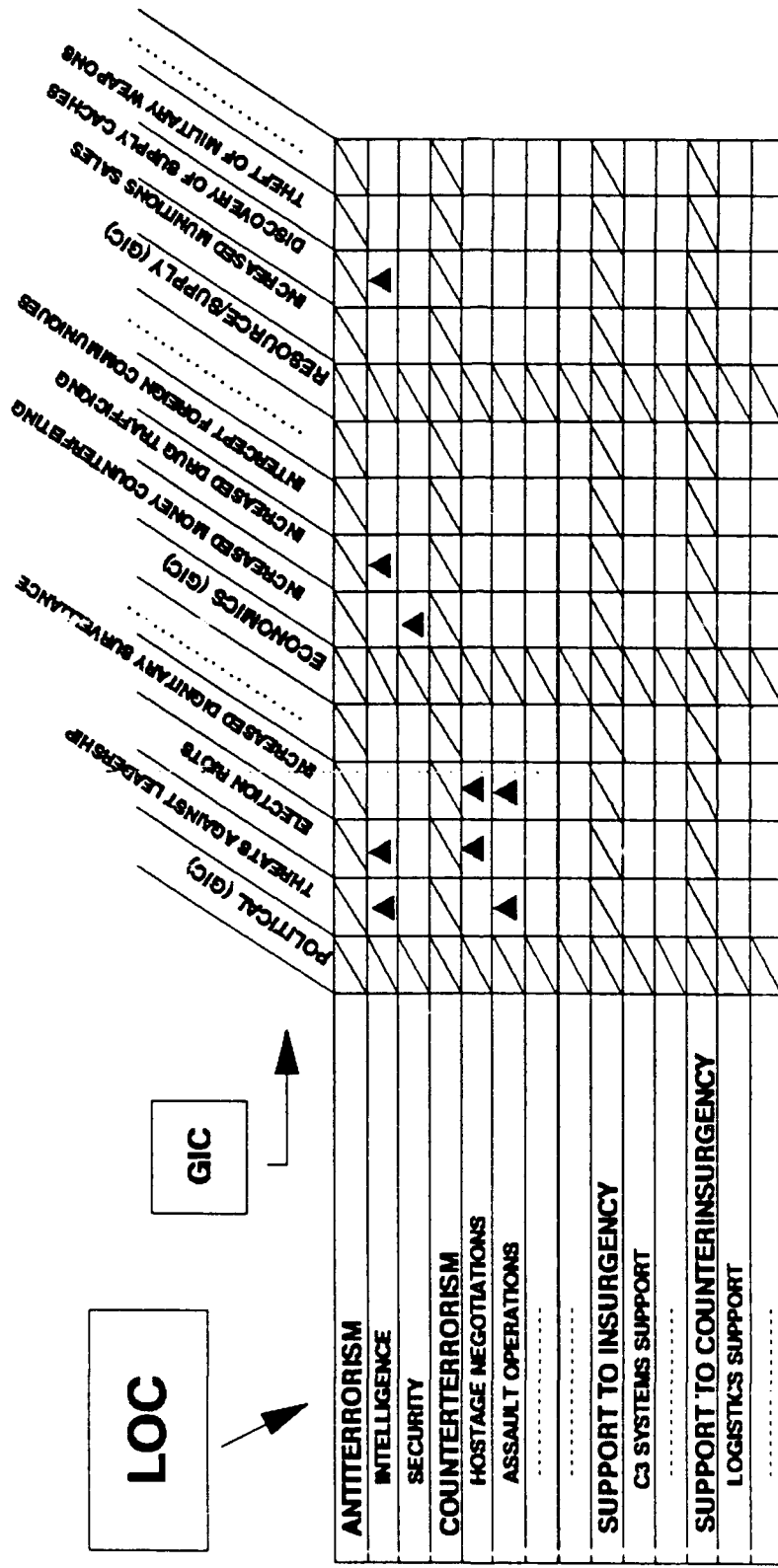
| EXAMINE | APPLICATIONS |
|---------------------------------|--------------|
| ANTITERRORISM | |
| POLITICAL (GIC) | |
| THREATS AGAINST LEADERSHIP | ▲ |
| ELECTION RIOTS | ▲ |
| INCREASED DIGITARY SURVEILLANCE | |
| | |
| ECONOMIC (GIC) | |
| INCREASED MONEY COUNTERFEITING | |
| INCREASED DRUG TRAFFICKING | ▲ |
| INTERCEPT FOREIGN COMMUNIKUES | |
| | |
| RESOURCE/SUPPLY (GIC) | |
| INCREASED MUNITION SALES | |
| DISCOVERY OF SUPPLY CACHES | ▲ |
| | |



MODIFY GIC
REPEAT PHASE 1
STEPS 2 & 3

DEVELOP
MATRIX
AND
CERTIFY
APPLICABILITY

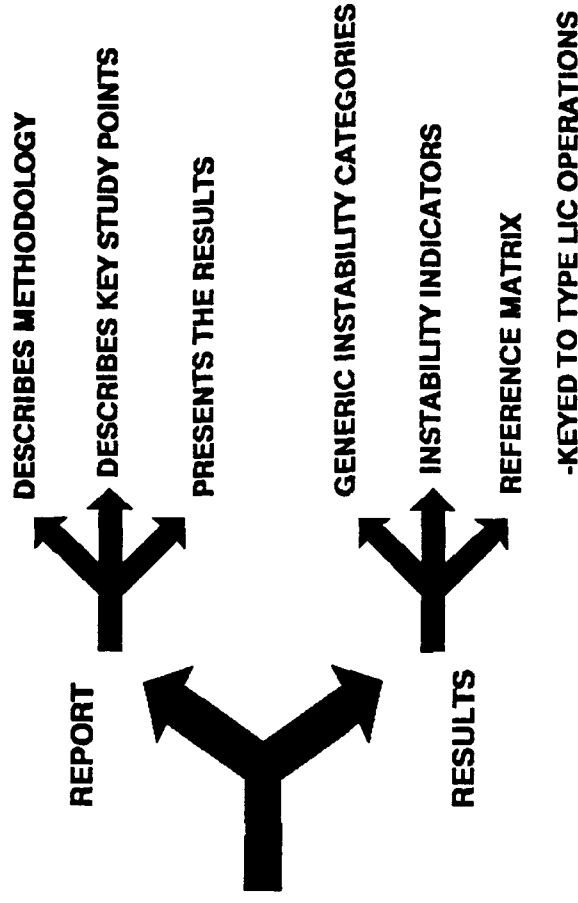
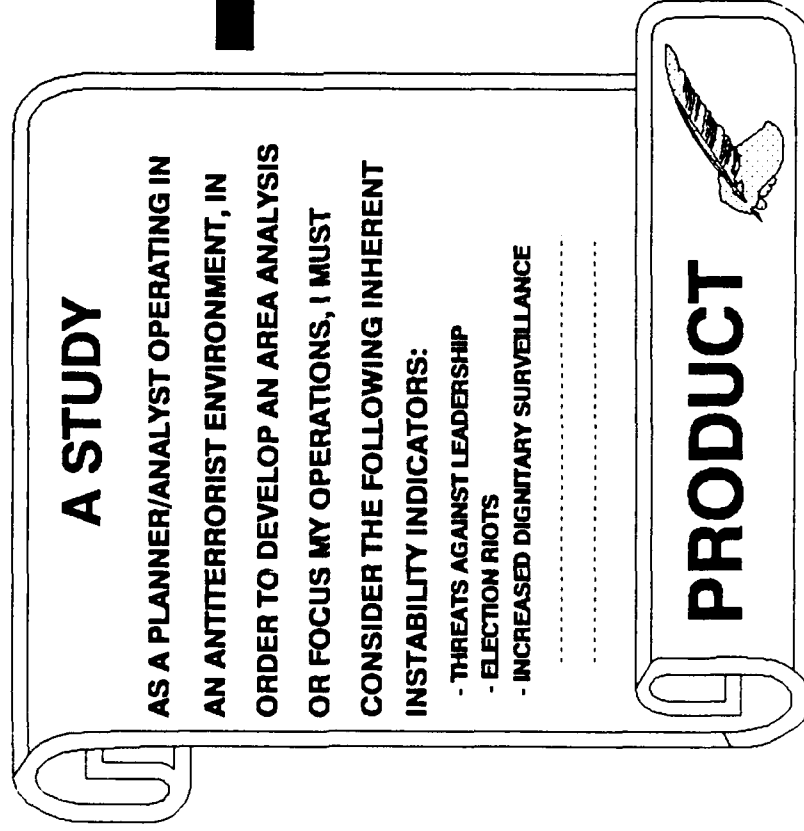
PRODUCT



▲ CERTIFICATION

★ COORDINATION REQUIREMENT

LI²S PRODUCT



LIC PLANNING CONSIDERATIONS STUDY

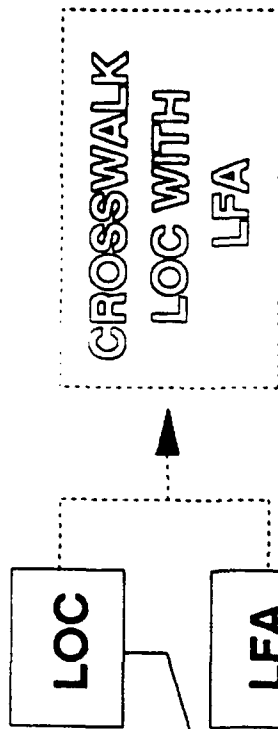
CONCEPT

THE LIC PLANNING CONSIDERATIONS STUDY WILL IDENTIFY THE CRITICAL FACTORS THAT MUST BE ADDRESSED IN ORDER TO SUCCESSFULLY ACCOMPLISH ALL OPERATIONS WITHIN THE FOUR CATEGORIES OF LOW INTENSITY CONFLICT. THESE PLANNING CONSIDERATIONS WILL HAVE APPLICATION IN THE REVIEW AND FORMULATION OF ARMY/AIR FORCE STRATEGY, CONCEPTS, DOCTRINE, PLANS, PROGRAMS, AND BUDGETS.

METHODOLOGY

- JOINT PUB 3-07/FM100-20/AFP3-20 SERVE AS BASE
- IDENTIFY LIC FUNCTIONAL AREAS (LFA)
 - LFA = MAJOR TASK CATEGORIES CRITICAL TO SUCCESSFUL OPERATIONS IN A LIC ENVIRONMENT
- CROSSWALK LFA WITH LIC OPERATIONAL CATEGORIES (LOC)
- IDENTIFY GAPS IN LFA
- MODIFY LFA
- FINAL REVIEW AND COMMENTS BY KEY LIC PLAYERS

LPCS PROCESS --- PHASE I



KNOWN

TO BE DEVELOPED

PEACEKEEPING

- SUPERVISION OF FREE TERRITORIES
- SUPERVISION OF CEASE-FIRES
- SUPERVISION OF WITHDRAWALS/DISENGAGEMENTS
- SUPERVISION OF POW EXCHANGES
- SUPERVISION OF DEMILITARIZATION/DEMobilIZATION

MAINTENANCE OF LAW AND ORDER

SUPPORT TO INSURGENCY

ADVISORY/TRAINING ASSISTANCE

SUPPORT TO COUNTERINSURGENCY

CIVIL MILITARY OPERATIONS

ANTITERRORISM

SECURITY

COUNTERTERRORISM

HOSTAGE RESCUE

CONTINGENCY OPERATIONS IN LIC

DISASTER RELIEF

NATION ASSISTANCE (LFA)

- SUSTAINMENT ENGINEERING (TC)
- NEW CONSTRUCTION (T)
- RESTORATION (T)
- HQ CONST SPT (T)

TRANSPORT SERVICES (TC)

- TERMINAL OPS (T)
- MOVE CARGO/EQUIP/PER (T)

HEALTH SERVICES (TC)

- MEDICAL TREATMENT (T)
- EVACUATE CASUALTIES (T)
- PREVENTIVE MED (T)
- VET SERVICES (T)

MOBILIZATION ASSISTANCE (TC)

- ORGANIZATIONAL SPT (T)

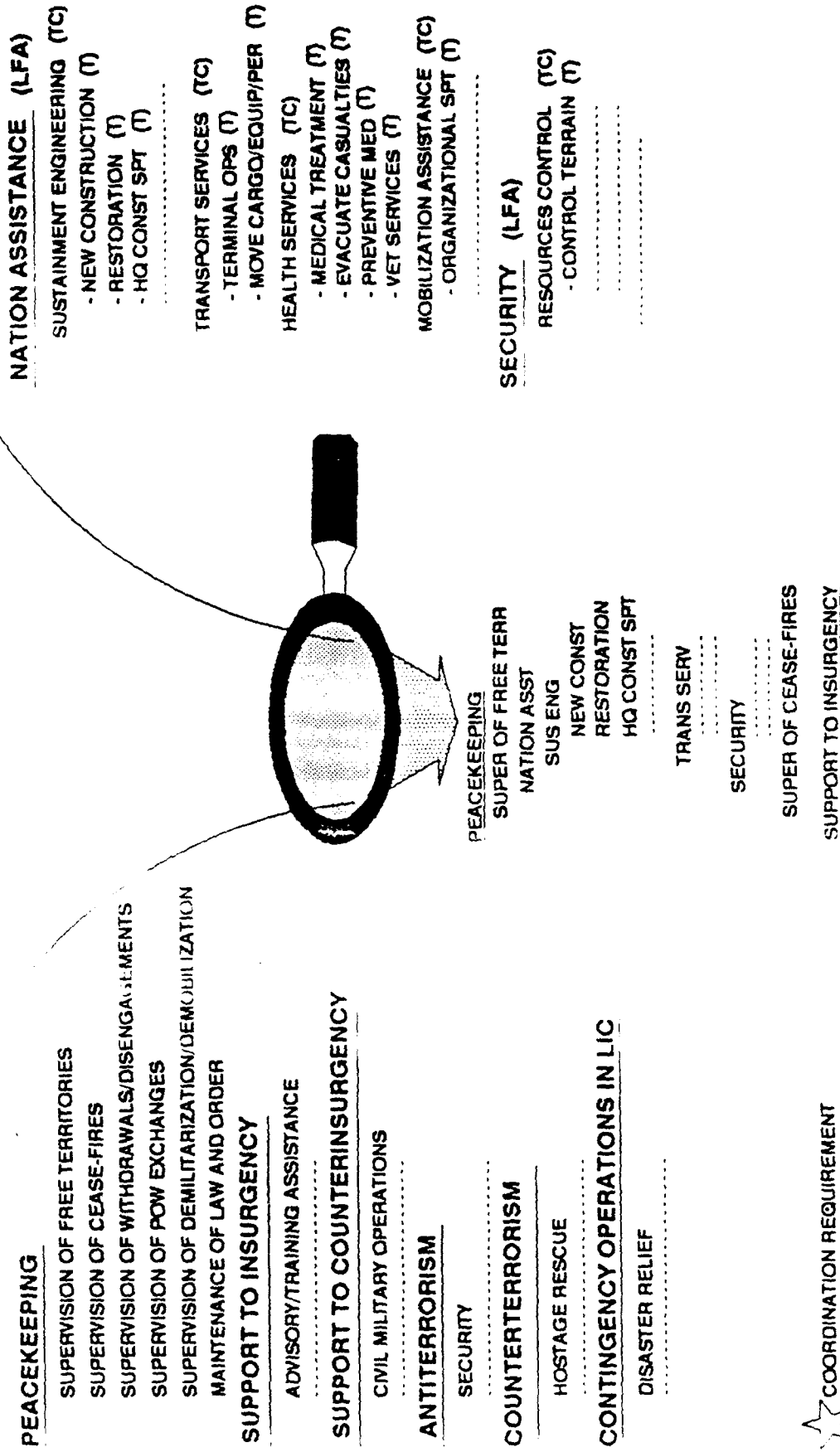
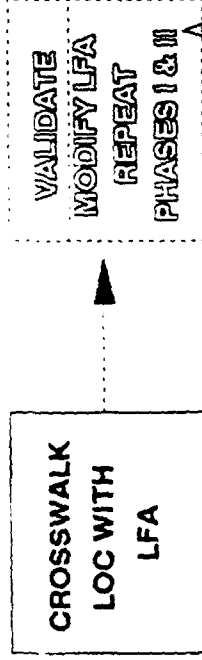
SECURITY (LFA)

RESOURCES CONTROL (TC)

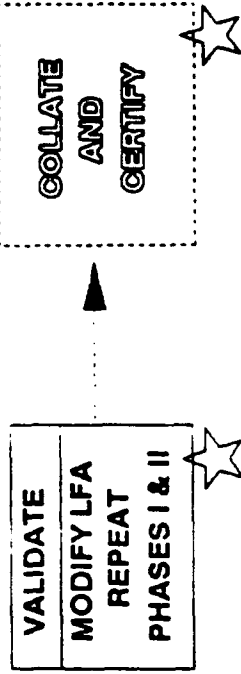
- CONTROL TERRAIN (T)

(TC) TASK CATEGORY
(T) TASK

LPCS PROCESS --- PHASE II



LPCS PROCESS --- PHASE III



PEACEKEEPING

SUPER OF FREE TERR

NATION ASST

SUS ENG

NEW CONST

RESTORATION

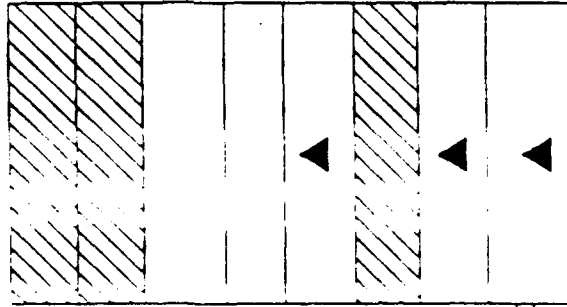
HQ CONST SPT

TRANS SERV

TERMINAL OPERATIONS

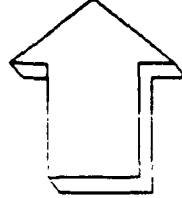
MOVE CARGO/EQUIP/PAX

APPLICATIONS



+

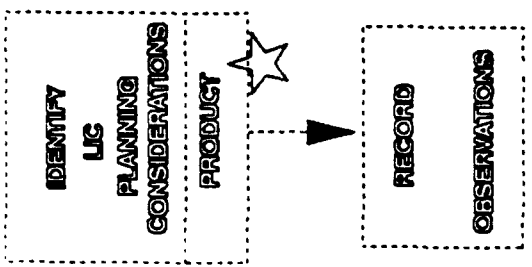
ANY NEEDED
- TASK CATS
- TASKS



MODIFIED
LFA

★ COORDINATION REQUIREMENT

LPCS PROCESS PHASE IV



LIC
OPERATIONAL
CATEGORY

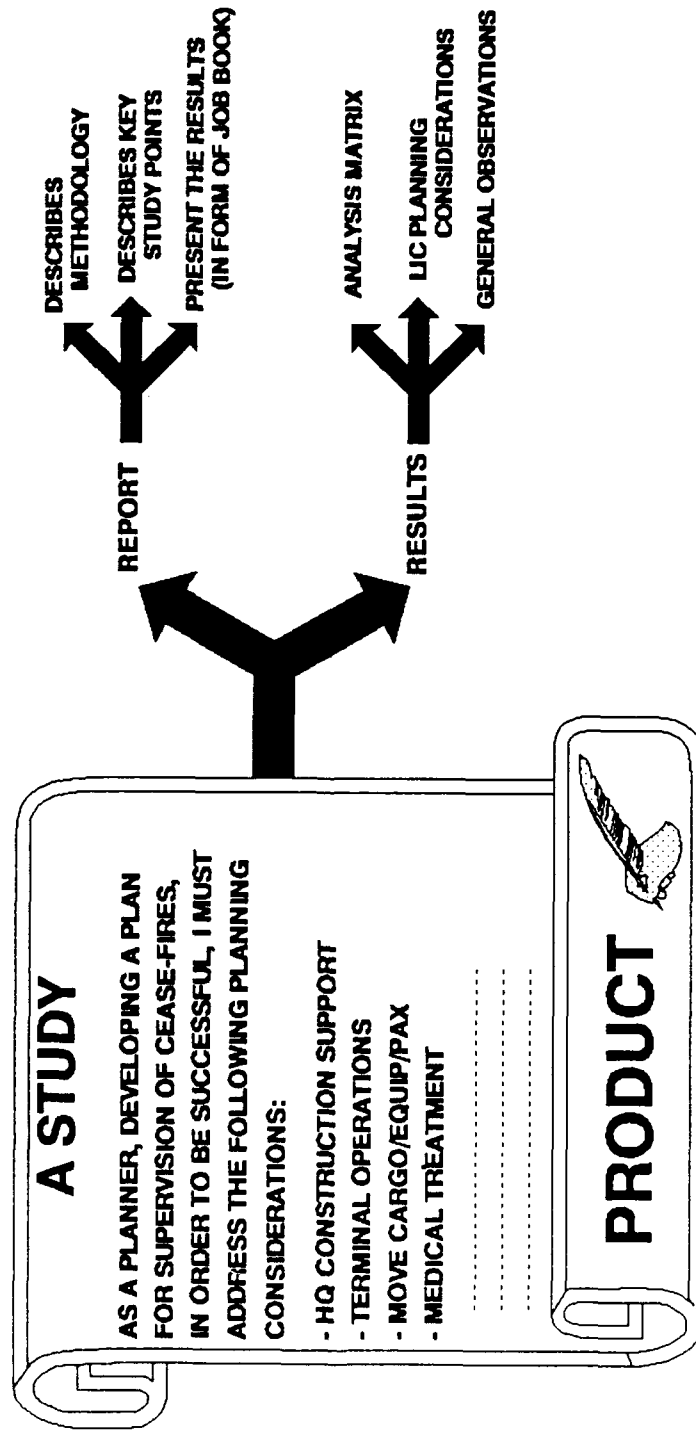
PEACEKEEPING

SUPER OF FREE TERR
SUPER OF CEASE FIRES
SUPER DEMIL/DEMOB
SUPER POW EX

| | | | | | |
|------------------------------|--|--|--|--|--|
| NATION ASSISTANCE (LFA) | | | | | |
| SUSTAINMENT ENGINEERING (TC) | | | | | |
| NEW CONSTRUCTION (T) | | | | | |
| RESTORATION (T) | | | | | |
| HQ CONSTRUCTION SUPPORT (T) | | | | | |
| | | | | | |
| TRANSPORT SERVICES (TC) | | | | | |
| TERMINAL OPERATIONS (T) | | | | | |
| MOVE CARGO/EQUIP/PER (T) | | | | | |
| HEALTH SERVICES (TC) | | | | | |
| MEDICAL TREATMENT (T) | | | | | |
| EVACUATE CASUALTIES (T) | | | | | |
| PREVENTIVE MED (T) | | | | | |
| VET SERVICES (T) | | | | | |
| MOBILIZATION ASSISTANCE (TC) | | | | | |
| | | | | | |

REVIEW AND COMMENT
CERTIFICATION

LPCS PRODUCT



✓ - IS APPL CABLE IN MOST CASES

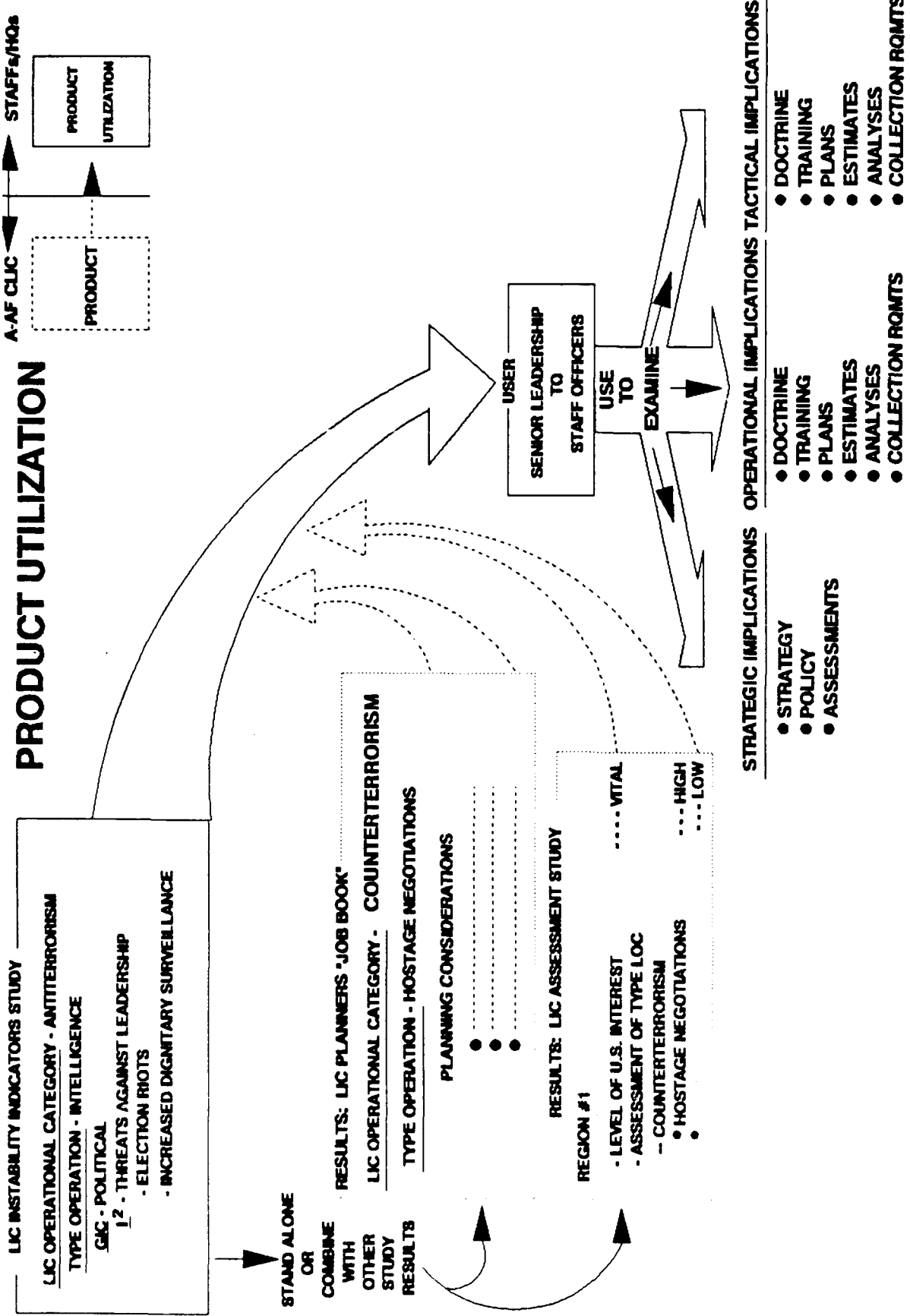
[illegible]

IS APPLICABLE IN MOST CASES

- I. CONTINGENCY OPERATIONS IN LC
 - a. DISASTER RELIEF
 - b. SHOWS OF FORCE
 - c. NEO
 - d. RECOVERY
- J. ATTACKS AND RAIDS
 - f. FREEDOM OF NAV/PROTECTION OF SHIPPING
 - g. OPERATIONS TO RESTORE ORDER
 - h. SECURITY ASSISTANCE BURGLES
- K. DOO SUPPORT TO COUNTERTERRORISM
 - i. SUPPORT TO U.S. CIVIL AUTHORITIES
- L. ANTI-TERRORISM
 - a. INTELLIGENCE
 - b. SECURITY
- M. COUNTERTERRORISM
 - a. INTELLIGENCE
 - b. SECURITY
 - c. HOSTAGE NEGOTIATIONS
 - d. HOSTAGE RESCUE
 - e. ASSAULT OPERATIONS
- N. SUPPORT TO INSURGENCY
 - a. ADVISORY TRAINING ASSISTANCE
 - b. INTELLIGENCE SUPPORT
 - c. LOGISTICS SUPPORT
- O. C3 SYSTEMS SUPPORT
 - d. SUPPORT TO COUNTERINSURGENCY
 - e. ADVISORY TRAINING ASSISTANCE
 - f. INTELLIGENCE SUPPORT
 - g. LOGISTICS SUPPORT
- P. C4E MILITARY OPS
 - h. C3 SYSTEMS SUPPORT
 - i. ASSAULT OPS
- VI. PEACEMAKING
 - a. SUPERVISION OF FREE TERRITORIES
 - b. SUPERVISION OF CEAS-FIRES
 - c. SUPERVISION OF WITHDRAWALS/REINFORCEMENT
 - d. SUPERVISION OF POW EXCHANGES
 - e. SUPERVISION OF DEARMING/DEMILITARIZATION
 - f. MAINTENANCE OF LAW AND ORDER

| OBSERVATIONS | USER | DOCUMENT/PROCESS | USE |
|---|----------|---------------------|--|
| PLANNING | DAMO-SSM | DPG | SEC B/E; KEY TRENDS/MILITARY STRATEGY |
| | DAMO-FDQ | JSR | INTELL ASSESSMENT; CINC'S STRATEGIC PRIORITIES |
| | DAMI-PI | CHAIRMAN'S GUIDANCE | RECOMMENDED STRATEGIC PRIORITIES |
| | AF/XOX | JSCP; TAP | SEC II/II; SEC VII STRATEGIC PLANNING GUIDANCE |
| | DAMO-ODO | JOPE | JP502.1; STRATEGY MODIFICATION/DETERMINATION |
| MILITARY FACTORS NATION ASSISTANCE SUPPORT/TRAINING | AF/PR | | |
| | AF/XOX | PPBS | POM |
| | DAMO-FDQ | | |
| | DAMO-SSP | | |
| | DAMO-SSM | JSR | THREAT ASSESSMENT SECTION; INTEL ASSESSMENT |
| | AF/INXX | NMSD | CHAP1/2; EMERGING WORLD ORDER/ROLE OF DOD |
| | DAMO-FDQ | | |
| THREAT ASSESSMENT | DAMI-FII | JSCP | SEC II; STRATEGIC SETTING |
| | DAMI-PI | | |
| | DAMO-ODO | JOPE | THREAT IDENTIFICATION & ASSESSMENT |
| | AF/XOX | | |
| | DIA | JSR | THREAT ASSESSMENT SECTION; INTEL ASSESSMENT |
| | CIA | | |
| | DAMO-FDQ | JSR | THREAT ASSESSMENT SECTION; INTEL ASSESSMENT |
| | DAMI-FII | NMSD | CHAP1; EMERGING WORLD ORDER |
| | DAMI-PI | JSCP | SEC III; PLANNING GUIDANCE |
| | AF/INXX | | SEC V; REGIONAL PLANS |
| | | | SEC VII; CONCLUSION |
| | DAMO-ODO | | ANNEX A (INTEL) |
| | AF/XOX | JOPE | THREAT IDENTIFICATION & ASSESSMENT |
| | DIA | TAP | SEC III; THREAT |
| | CIA | | |
| | DOS | DPG | SEC B; KEY TRENDS |

PRODUCT UTILIZATION



SUMMARY

- **STUDIES ARE OUTGROWTH OF CLIC'S STRATEGY AND DOCTRINE DEVELOPMENT**
- **ORIGINAL METHODOLOGY/CREATING PRODUCT**
- **STUDIES ARE BOTH REVOLUTIONARY AND EVOLUTIONARY**
- **RESULTS OF THREE EFFORTS CAN BE USED BY STRATEGISTS AND FORCE DEVELOPERS TOGETHER OR INDIVIDUALLY**

SYNOPSIS OF
THE CHALLENGE OF THE FUTURE
by LTC SAM HENDERSON

1. Within the Army proponentcy system, low intensity conflict is a growing responsibility and increasing in relative importance. As such, national political leadership (the President and Congress) support for LIC, a national drug strategy, and combatting terrorism will have significant military implications. Among them, a changing strategy and an ability to address the LIC environment (slide #5).

2. Combatting drugs is very high on the priority list. To support this statement, LTC Henderson displayed drug-related quotes by GEN Colin Powell, Mr Stephen Duncan, ASD, LTG Claude Kicklighter, Commander USARPAC, and GEN George Joulwan, CINCSO. What they say is that combatting drugs is indeed a high priority national security mission and a top peacetime priority in the CINCs areas of responsibility.

3. Military operations in support of low intensity conflict involve support for insurgency and counterinsurgency, peacekeeping operations, combatting terrorism, and peacetime contingency operations. For each category and type operation, examples were given of Army support. To exhibit just one, support to U.S. civil authority (under peacetime contingency operations), are forest fires, ecological disasters (Exxon Valdez), counter-drug (Bolivia, Columbia, Peru, Panama, Caribbean, CONUS).

4. The LIC Proponentcies Directorate must address these issues. It is not an easy task considering the diversity of the LIC operating categories, especially the type operations within the peacetime contingency operations category. Adding complexity to the task is the extremely broad interagency nature of the requisite actions. An immense amount of coordination and agreement are necessary. These factors are an indication that we are in a transition period toward the primacy of joint over service doctrine.

5. The LIC Proponentcies Directorate has the task of assisting the Army leadership to prepare the Army to meet this critical Challenge of the Future.

UNCLASSIFIED

CAA LIC ANALYSIS WORKSHOP

BOTTOM LINE

- ACCEPTANCE THAT LIC IS THE MOST LIKELY SECURITY CHALLENGE WE WILL FACE
- AT ALL LEVELS, PROBLEMS IN ACHIEVING CONSENSUS ON DEFINITION FOR LIC
- PROBLEMS IN ACHIEVING UNITY OF EFFORT...MANY BUREAUCRATIC OBSTACLES
- GENERAL ACCEPTANCE OF NEED TO APPLY "INNOVATIVE STRATEGIES" FOCUSING ON "ROOT CAUSES OF INSTABILITY"
- CONCEPTS OF PEACETIME ENGAGEMENT AND NATION ASSISTANCE TAKING HOLD
- PROBLEMS IN MODELING AND DEFINING REQUIREMENTS FOR MILITARY FORCES AND RESOURCES ARE LIKELY TO CONTINUE

MAJ ROCKE, DAMO-SSP, ODCSOPS

UNCLASSIFIED

SYNOPSIS OF
LIC POLICY OVERVIEW
by MAJ MARK ROCKE

1. This was a straight forward and high impact briefing. The overview of LIC policy was framed by key excerpts from national, DOD, and Army guidance statements. Those documents are listed on slide #2.
2. Two recurring themes characterize the guidance statements. First, warnings of future unrest in the world. Second, the way to prevent or counteract that unrest is increasingly through interagency and non-lethal actions.
3. The term "unrest" may be understated. More specific terminology employed in the guidance documents follow: "counter threats to security of U.S.," "scourge [of drugs]," "ranging from violence spawned by narco-trafficking, to terrorism, to insurgencies," "increased ethnic and religious tensions and shifting demographics, all of which may fuel local instabilities," "threatens international alliances," "plagued by economic deprivation and ecological ruin," "nationalistic fervor," "adverse climatic conditions, population growth, unstable prices, and disease," "problems in achieving unity of effort," and "problems in modeling and defining requirements for military forces and resources are likely to continue."
4. Equally impressive, though understandably less well defined, were the words describing how to address this multifaceted problem. Some examples are "short of armed conflict," "promote growth of free, democratic institutions," "military-to-military relations will emphasize professionalism, support for civilian authority, and respect for human rights," "political-military confrontation short of war," "permanent interagency working group established," "promote peace, freedom, and democracy in third world through the *peacetime engagement* of our armed forces," "improve capabilities to address root causes of instability," "require innovative strategies," "staunching the flow of drugs into the U.S.," "peacetime measures in deterring aggression and defusing crises," "a greater focus on peacetime operations that improve foreign . . . democratic and economic development and security," and "a closer analysis of military operations in peacetime competition."
5. This policy overview produced a vigorous discussion. One aspect of the discussion centered on whether counter-drug actions and LIC are related. Some advocate that the two are separate issues. Just as many insist that drugs and LIC cannot be disparate. The issue was left unsettled.
6. Slide #9 presents the bottom line. Our work is cut out for us.

UNCLASSIFIED

CAA LIC ANALYSIS WORKSHOP

LIC POLICY OVERVIEW



DEPUTY CHIEF OF STAFF
FOR OPERATIONS AND PLANS

PRESENTATION FOR LIC ANALYSIS WORKSHOP

MAJ MARK D. ROCKE

DAMO-SSP

MAJ ROCKE, DAMO-SSP, ODCSOPS

UNCLASSIFIED

UNCLASSIFIED

CAA LIC ANALYSIS WORKSHOP

KEY GUIDANCE

- NATIONAL SECURITY STRATEGY, 1991 (DRAFT), TBP JUN 91 (T)
- NATIONAL SECURITY REVIEW 27, 17 MAY 91, FINAL REPORT TBP
- DEFENSE PLANNING GUIDANCE, FY 92-97, JAN 90
- SECDEF ANNUAL REPORT, 1991, JAN 91
- NATIONAL MILITARY STRATEGY, FY 94-99 (DRAFT), TBP JUL 91 (T)
- ARMY POSTURE STATEMENT, JAN 91

MAJ ROCKE, DAMO-SSP, ODCSOPS

UNCLASSIFIED

UNCLASSIFIED

CAA LIC ANALYSIS WORKSHOP

NATIONAL SECURITY STRATEGY, 1991

- INTENT IS "TO OUTLINE PRINCIPLES THAT WILL SHAPE U.S. RESPONSES TO NEW SECURITY ENVIRONMENT"
- CLEAR OBJECTIVE IS TO "COUNTER THREATS TO SECURITY OF U.S. - AND ITS CITIZENS AND INTERESTS - SHORT OF ARMED CONFLICT"
- GOAL IS TO "PROMOTE GROWTH OF FREE, DEMOCRATIC INSTITUTIONS FROM AGGRESSION, COERCION, INSURGENCIES, SUBVERSION, TERRORISM, AND ILLICIT NARCOTICS TRAFFICKING"
- "SCOURGE [OF DRUGS] SAPS OUR VITALITY AS A FREE PEOPLE...AND THREATENS TO CRIPPLE FRIENDLY DEMOCRATIC GOVERNMENTS NOW PLAGUED BY DRUG TRAFFICKERS."
- "[WE] SEEK TO REDUCE THE FLOW OF ILLEGAL DRUGS INTO THE U.S. BY COMBATTING TRAFFICKERS ABROAD...."
- "MILITARY-TO-MILITARY RELATIONS WILL EMPHASIZE PROFESSIONALISM, SUPPORT FOR CIVILIAN AUTHORITY, AND RESPECT FOR HUMAN RIGHTS."

MAJ ROCKE, DAMO-SSP, ODCSOPS

UNCLASSIFIED

UNCLASSIFIED

CAA LIC ANALYSIS WORKSHOP

NATIONAL SECURITY REVIEW 27

- INITIATED IN JUN 90 TO REVIEW USG STRATEGY AND ORGANIZATION FOR LIC
- LIC DEFINITION -- AVOID UNLESS REQUIRED TO "SEPARATE SPECTRUM OF CONFLICT"
- NSDD 277 DEFINITION (POL-MIL CONFRONTATION SHORT OF WAR) STILL VALID
- UNITY OF EFFORT -- PERMANENT INTERAGENCY WORKING GROUP ESTABLISHED
- ALLOCATION OF RESOURCES -- LITTLE RELIEF FROM CONGRESSIONAL EARMARKING

MAJ ROCKE, DAMO-SSP, ODCSOPS

UNCLASSIFIED

UNCLASSIFIED

CAA LIC ANALYSIS WORKSHOP

DEFENSE PLANNING GUIDANCE, FY 92-97

- " ...MUST IMPROVE ABILITY TO PROMOTE PEACE, FREEDOM, AND DEMOCRACY IN THIRD WORLD THROUGH THE *PEACETIME* ENGAGEMENT OF OUR ARMED FORCES."
- "CHALLENGE POSED BY LIC -- RANGING FROM VIOLENCE SPAWNED BY NARCO-TRAFFICKING, TO TERRORISM, TO INSURGENCIES -- SEEMS LIKELY TO GROW."
- "U.S. MUST...IMPROVE CAPABILITIES TO ADDRESS ROOT CAUSES OF INSTABILITY...USING ALL INSTRUMENTS OF NATIONAL POWER -- POLITICAL, ECONOMIC, INFORMATIONAL, AND MILITARY."
- "DoD EFFORTS [IN LIC] MUST INCLUDE CLOSE COORDINATION WITH OTHER USG AGENCIES."

MAJ ROCKE, DAMO-SSP, ODCSOPS

UNCLASSIFIED

UNCLASSIFIED

CAA LIC ANALYSIS WORKSHOP

DoD ANNUAL REPORT

- "DECADE TO COME LIKELY TO SEE INCREASED ETHNIC AND RELIGIOUS TENSIONS AND SHIFTING DEMOGRAPHICS, ALL OF WHICH MAY FUEL LOCAL INSTABILITIES."
- "PEACETIME ENGAGEMENT IS A STRATEGY THAT SEEKS TO COUNTERACT VIOLENCE..."
- "... IN WHICH VARIOUS FORMS OF U.S. NATIONAL POWER ARE ENGAGED TO PROMOTE PRIVATE ENTERPRISE, MARKET-ORIENTED ECONOMIC GROWTH, DEMOCRACY, HUMAN RIGHTS, AND AN ENVIRONMENT CONDUCTIVE TO REPRESENTATIVE GOVERNMENT."
- "[LIC] THREATENS INTERNATIONAL ALLIANCES... VITAL TO COALITION DEFENSE...."
- "EFFECTIVE RESPONSES [TO LIC]... REQUIRE INNOVATIVE STRATEGIES THAT SUPPORT REPRESENTATIVE GOVERNMENT, INTEGRATE SECURITY ASSISTANCE, AND PROMOTE ECONOMIC DEVELOPMENT."

MAJ ROCKE, DAMO-SSP, ODCSOPS

UNCLASSIFIED

UNCLASSIFIED

CAA LIC ANALYSIS WORKSHOP

NATIONAL MILITARY STRATEGY, FY 94-99

- "AS WE HERALD THE SPREAD OF DEMOCRACY, WE ALSO RECOGNIZE MUCH MUST BE DONE TO IMPROVE THE HUMAN CONDITION IN THE THIRD WORLD...WHICH CONTINUES TO BE PLAGUED BY ECONOMIC DEPRIVATION AND ECOLOGICAL RUIN."
- "SUCH CONDITIONS OFTEN LEAD TO INSURGENCIES, TERRORISM, DRUG-RUNNING, AND NATIONALISTIC FERVOR...."
- FUNDAMENTAL TASKS OF THE ARMED FORCES INCLUDE: "STAUNCHING THE FLOW OF DRUGS INTO THE U.S....[AND]...THWARTING AND RESPONDING TO THE ACTIONS OF TERRORISTS."
- "THE IMPORTANCE OF PEACETIME MEASURES IN DETERRING AGGRESSION AND DEFUSING CRISES WILL LIKELY GROW AS MILITARY RESOURCES SHRINK."
- "PEACETIME ACTIVITIES WHICH PROVIDE NATION ASSISTANCE, INFLUENCE BUILDING, DETERRENCE, AND STABILITY WILL REDUCE THE NEED FOR A MILITARY RESPONSE."

MAJ ROCKE, DAMO-SSP, ODCSOPS

UNCLASSIFIED

UNCLASSIFIED

CAA LIC ANALYSIS WORKSHOP

ARMY POSTURE STATEMENT

- "LIC IS THE SECURITY CHALLENGE MOST LIKELY TO CONFRONT THE ARMY IN THE 1990s"
- "DRUG TRAFFICKING, INTERNATIONAL TERRORISM, INSURGENCY, AND SUBVERSION OF LEGITIMATE REGIMES POSE SERIOUS THREATS TO U.S. INTERESTS AROUND THE WORLD."
- "ADVERSE CLIMATIC CONDITIONS, POPULATION GROWTH, UNSTABLE PRICES, AND DISEASE...OFTEN LEAD TO THE EROSION OF NATIONAL UNITY...AND VIOLENCE."
- "THE NATIONAL SECURITY STRATEGY...SUGGESTS A GREATER FOCUS ON PEACETIME OPERATIONS THAT IMPROVE FOREIGN...DEMOCRATIC AND ECONOMIC DEVELOPMENT AND SECURITY."
- "FUTURE DOCTRINE...WILL INCLUDE...A CLOSER ANALYSIS OF MILITARY OPERATIONS IN PEACETIME COMPETITION...AND REFINEMENT OF THE DOCTRINAL PRINCIPLES OF LIC."
- "...PARTICULARLY OPPORTUNE TIME TO EXPAND...NATION ASSISTANCE [TO FURTHER OBJECTIVES OF THE PEACETIME ENGAGEMENT STRATEGY]."

MAJ ROCKE, DAMO-SSP, ODCSOPS

UNCLASSIFIED

**LOW
INTENSITY
CONFLICT**

**THE
CHALLENGE
OF
CONFLICT**

**THE CHALLENGE OF CONFLICT
IN THE LOW INTENSITY CONFLICT
AREA**

LOW INTENSITY CONFLICT PROPENSITY

ARMY PROPONENT RESPONSIBILITIES

1. DEVELOP AND DOCUMENT

CONCEPTS

DOCTRINE

TACTICS

TECHNIQUES

PROCEDURES

ORGANIZATION DESIGNS

MATERIEL REQUIREMENTS

TRAINING PROGRAMS

TRAINING SUPPORT REQUIREMENTS

MANPOWER REQUIREMENTS (EXCEPT AS PROVIDED IN AR 600-3)

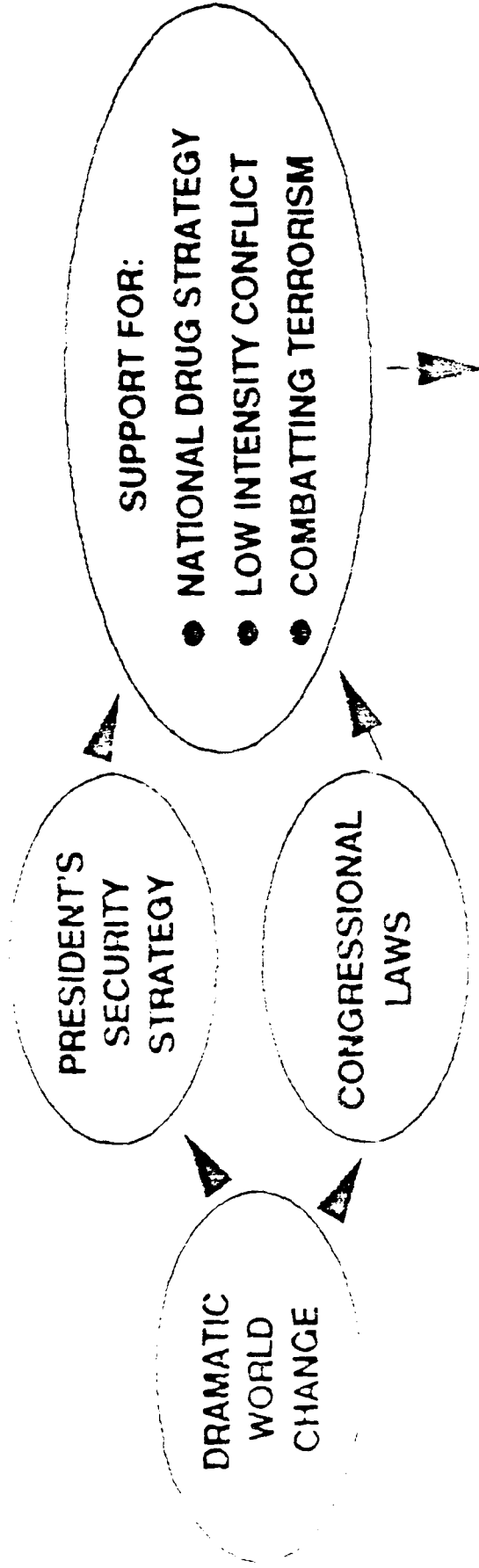
2. COORDINATE PROPONENT INITIATIVES WITH USER UNITS.

REF: AR 5-22

LOW INTENSITY CONFLICT

A Growing Responsibility

THE RELATIVE IMPORTANCE OF LIC HAS INCREASED



MILITARY IMPLICATIONS

- Military Strategy is Changing
- Still Need Forward Presence and Flexible Response
- Ability to Address LIC Environment

Combating Drugs

"... a high-priority national security mission for our armed forces. ... deal with this threat as a clear and present danger. We have accepted that mission ... this mission will continue to require deployed, properly trained, and well-equipped forces for the foreseeable future."

'...We in the Armed Forces have been involved during the past several months in two major, critical struggles--the War in the Gulf and the continuing War on Drugs--both real dangers to international peace and stability..."

Chairman Powell (MAR 91)

"...Despite the enormous requirements of Operation DESERT SHIELD/ DESERT STORM, the counter-drug activities of the Department continued throughout that period, and continue today, to be a high priority national security mission of the Department of Defense...We recognize, however, that the effort will likely be a long-term one..."

"...The Department will continue to devote significant resources and energy in all aspects of this national effort..."

Stephen M. Duncan, ASD - Pending Release, May 91

"...USCINCPAC's number one peacetime priority [is] support of the National War on Drugs..."

LTG Claude M. Kicklighter (1991)

SOUTHCOM's number one priority today is the counternarcotics effort.

General George A. Joulwan (1991)

LIC - AN ARMY MISSION GUIDANCE

NATIONAL SECURITY STRATEGY

SECDEF'S ANNUAL REPORT TO THE PRESIDENT AND THE CONGRESS

JOINT MILITARY NET ASSESSMENT, MARCH 1991

CHAIRMAN'S TESTIMONY TO CONGRESS, FEBRUARY 1991

VICE CHAIRMAN'S TESTIMONY TO CONGRESS, MARCH 1991

ARMY CHIEF OF STAFF WHITE PAPER, JANUARY 1990

GOLDWATER - NICHOLS DEFENSE REORGANIZATION ACT OF 1986

NATIONAL DRUG CONTROL STRATEGY, VOLS I, II, III

LIC - AN ARMY MISSION DOCTRINE

JOINT PUB 0-2, UNAAF

"COMMON FUNCTIONS OF THE MILITARY DEPARTMENTS"

JOINT PUB 3-0

"DOCTRINE FOR JOINT OPERATIONS"

JOINT PUB 3-07

"JOINT OPERATIONS IN LOW INTENSITY CONFLICT"

FM 100-5

"OPERATIONS"

FM 100-20

"MILITARY OPERATIONS IN LIC"

FM 100-37

"TERRORISM COUNTERACTION"

TRADOC PAM 525-5B

"ARMY JOINT OPERATIONS"

THE THREAT

SOVIET THREAT

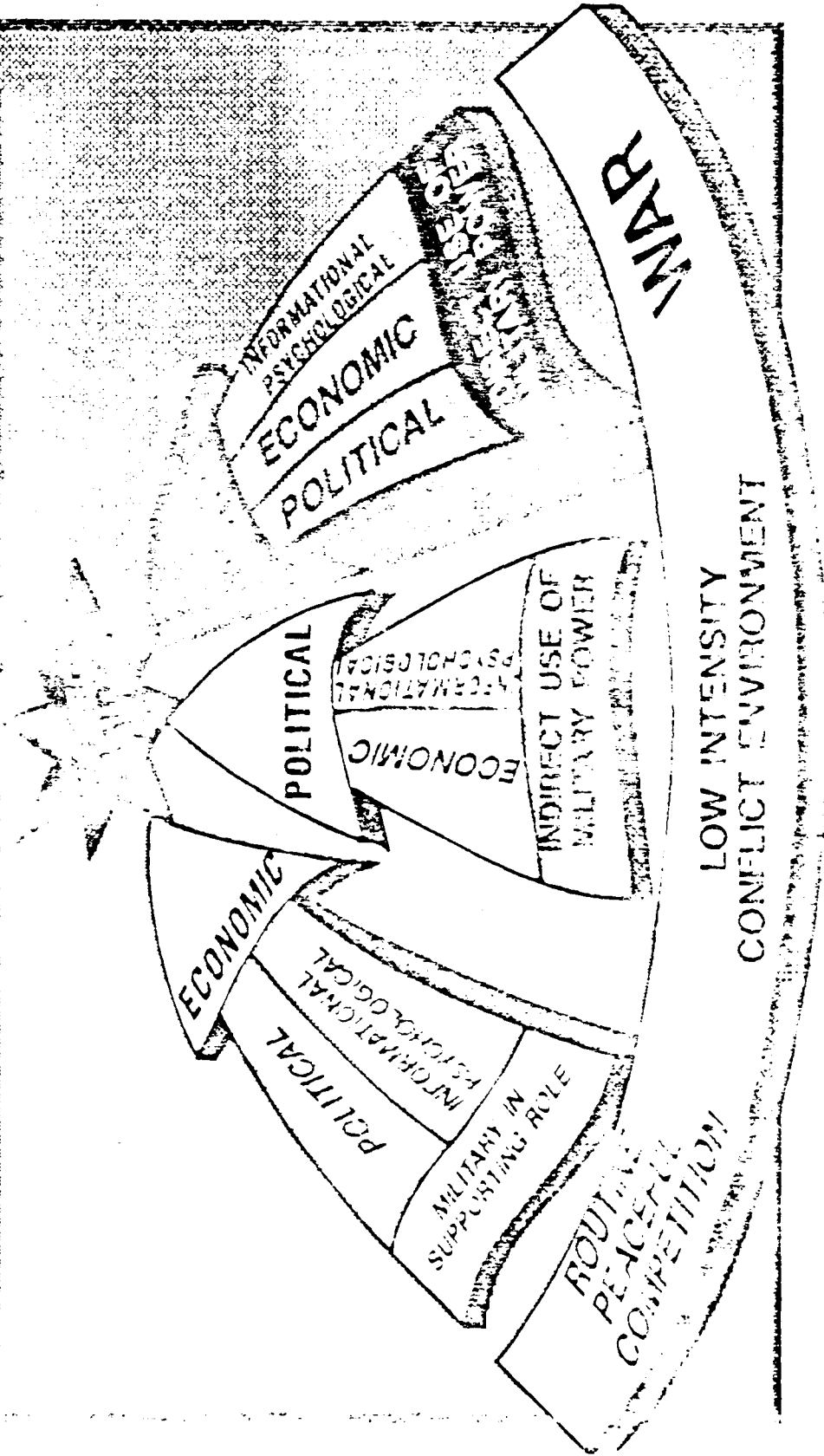
REGIONAL THREATS AND PROLIFERATION OF WEAPONS

DRUG TRAFFICKING

TERRORISM

0001-3

EMPLOYMENT OF THE ELEMENTS OF POWER IN CONFLICT



GP5215

IN CONVENTIONAL OPERATIONS

MILITARY FORCE IS
APPLIED DIRECTLY
TO PURSUE A STRATEGY



CONDUCTING
SUCCESSFUL
CAMPAIGNS
BATTLES
ENGAGEMENTS



ACHIEVE THE
DEFEAT
OF THE
ENEMY

SUCCESS

IN THE LOW INTENSITY CONFLICT ENVIRONMENT

MILITARY RESOURCES ARE
APPLIED INDIRECTLY
IN SUPPORT OF
POLITICAL, ECONOMIC AND
INFORMATIONAL/PSYCHOLOGICAL
U.S. GOVERNMENT INITIATIVES
WHICH PURSUE A
NON-MILITARY STRATEGY

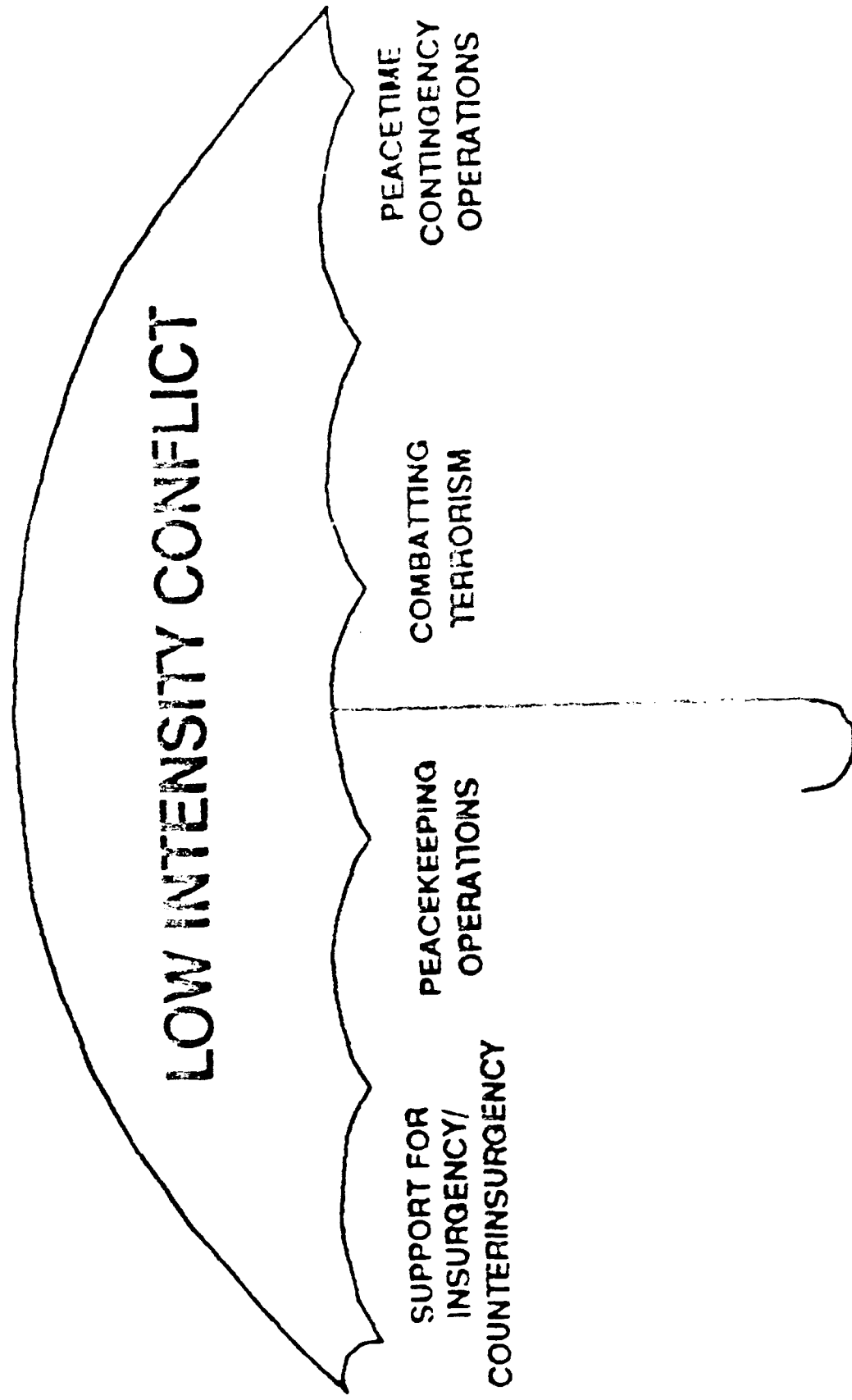


CONDUCTING
SUCCESSFUL
POLITICAL
ECONOMIC
INFORMATIONAL
PSYCHOLOGICAL
PROGRAMS
AND SUPPORTING
MILITARY ACTIONS



ACHIEVE
A RETURN TO
ROUTINE
PEACEFUL
COMPETITION

MILITARY OPERATIONS



LIC OPERATIONS

SUPPORT FOR INSURGENCY AND COUNTERINSURGENCY

COMBATTING TERRORISM

PEACEKEEPING OPERATIONS

PEACETIME CONTINGENCY OPERATIONS

SHOW OF FORCE AND DEMONSTRATION

NONCOMBATANT EVACUATION

RESCUE AND RECOVERY

STRIKES AND RAIDS

PEACEKEEPING

UNCONVENTIONAL WARFARE

DISASTER RELIEF

SECURITY ASSISTANCE SURGES

*** SUPPORT TO US CIVIL AUTHORITIES**

OTHERS

*** INCLUDES COUNTER DRUG OPERATIONS**

LOW INTENSITY CONFLICT

**The Modern Army - A Strategic Force
in the Evolving World**

INSURGE, CY/COUNTERINSURGENCY

AFGHANISTAN, CAMBODIA, ANGOLA, NICARAGUA, EL SALVADOR, HONDURAS, GUATEMALA, PHILIPPINES, PERU

COMBATTING TERRORISM

LIBYA, SYRIA, IRAN, GERMANY, ITALY, JAPAN, LATAM, ACHILLE LAURO, PAN AM 103, USA (DESERT STORM)

PEACEKEEPING OPERATIONS

ISRAEL-EGYPT, GOLAN HEIGHTS, LEBANON

PEACETIME CONTINGENCY OPERATIONS

SECURITY ASSISTANCE SURGES

ISRAEL, PANAMA, CHAD, EL SALVADOR, COLOMBIA

SUPPORT TO US CIVIL AUTHORITY

FOREST FIRES, ECOLOGICAL DISASTERS (EXXON VALDEZ)

COUNTER-DRUG (BOLIVIA, COLOMBIA, PERU, PANAMA, CARIBBEAN, CONUS)

LOW INTENSITY CONFLICT

**The Modern Army - A Strategic Force
in the Evolving World**

PEACETIME CONTINGENCY OPERATIONS (Continued)

NONCOMBATANT EVACUATION OPERATIONS

LIBERIA (USMC), GRENADA, SOMALIA

SHOWS OF FORCE/DEMONSTRATIONS

**HONDURAS (GOLDEN PHEASANT), DESERT SHIELD, PERSIAN GULF (NAVAL ESCORT),
PANAMA (NIMROD DANCER)**

PEACEMAKING OPERATIONS

DOMINICAN REPUBLIC (1966), ZAIRE (1960), IRAQ (KURDS)(?)

RESCUE AND RECOVERY OPERATIONS

IRAN, SON TAY, MAYAGUEZ INCIDENT

STRIKES AND RAIDS

LIBYA, IRAN

HUMANITARIAN ASSISTANCE (DISASTER RELIEF)

**EARTHQUAKES (NICARAGUA, USSR, COSTA RICA, EL SALVADOR, ECUADOR, ARMENIA)
VOLCANO (COLOMBIA), HURRICANE HUGO VICTIMS, AFGANISTAN KURD REFUGEES**

Among the Overall Priorities:

"... we will develop the weaponry and force structure needed for the special demands of the Third World even if it means that some forces are less optimal for a conflict on the European central front."

•Low-Intensity Conflict the most likely form of violence involving US Interests Insurgencies, regional hostilities, and terrorism, ... drug trafficking and ... chemical/biological weapons. We must prepare an active and timely defense against such violence, one that presents a credible deterrent and remains capable of using power when necessary. The Department must also address the underlying causes of instability by assisting through economic, security, and humanitarian assistance, and civic action in support of US foreign policy objectives."

Referring to Low Intensity Conflict:

"American forces therefore must be capable of dealing effectively with the full range of threats, including insurgency and terrorism.... we will ... pursue new and imaginative ways to apply flexible general purpose forces to these problems. [General Purpose] Units with unique capabilities in this environment will receive increased emphasis."

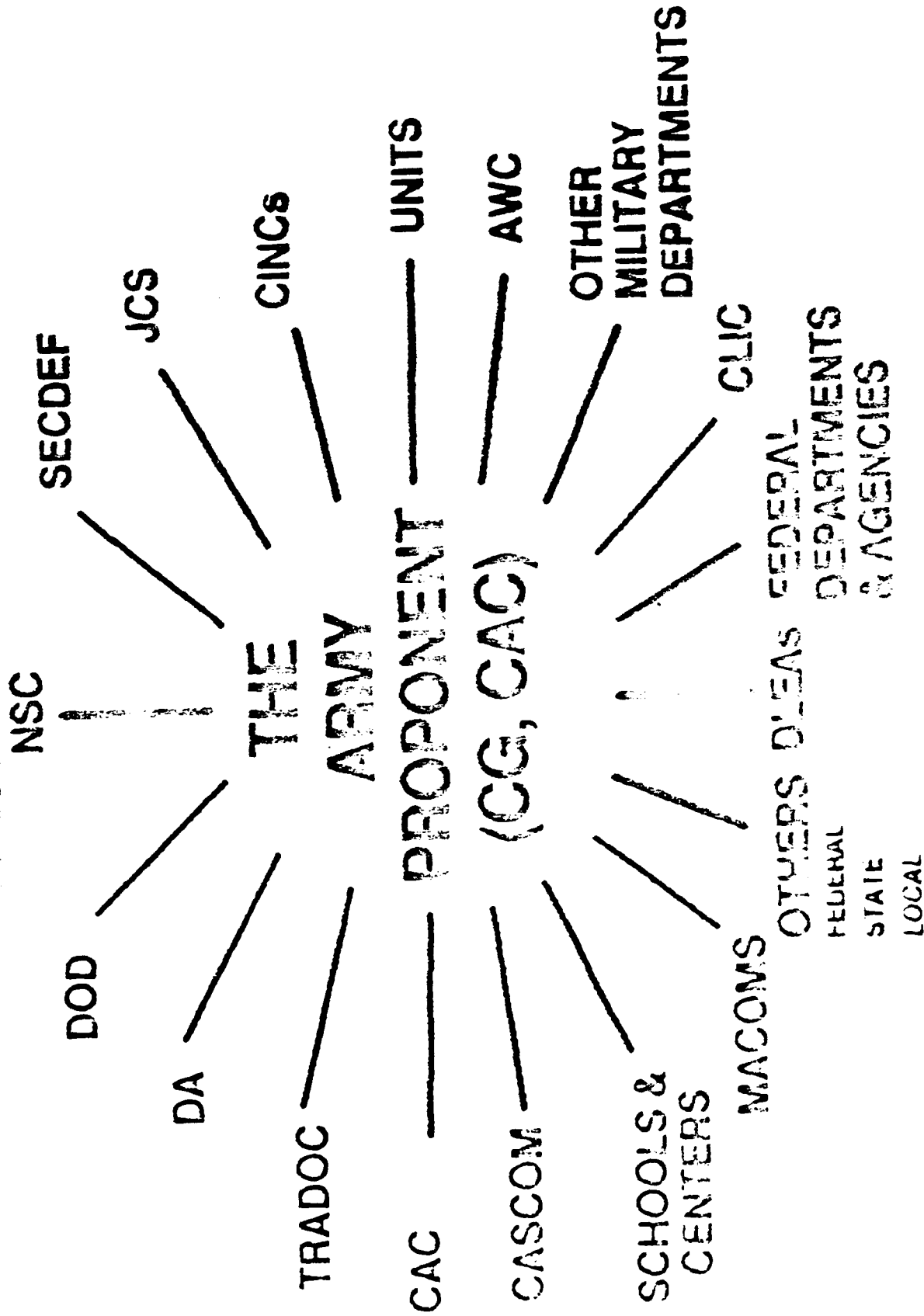
Combating Terrorism

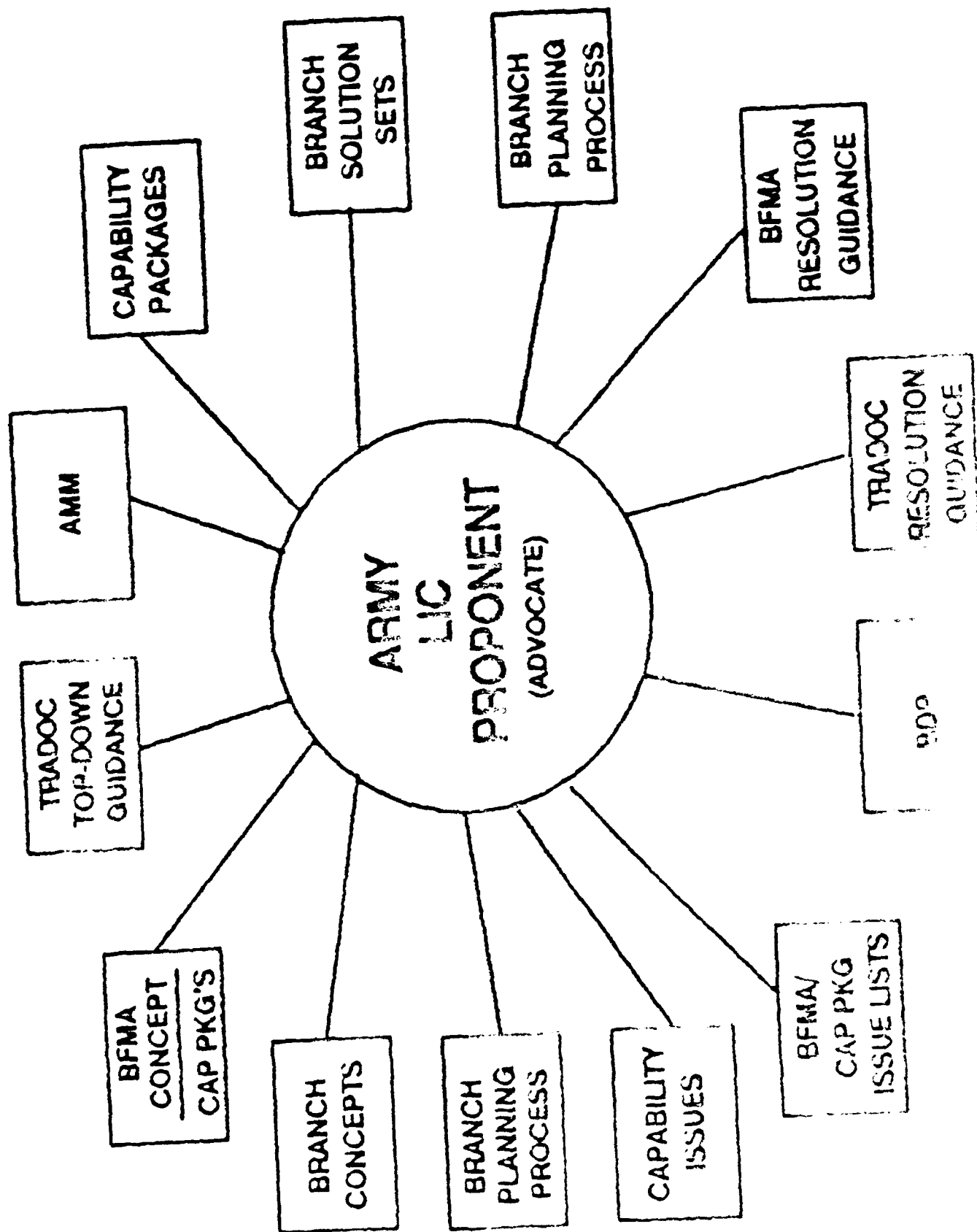
"... spread ... poses a pervasive threat ... Deterring terrorist attacks ... and responding effectively ... remains a continuing mission of US armed forces. This mission calls for a military force manned, equipped and trained to respond effectively ..."

Referring to Illicit Drugs:

• ... We recognize that military involvement in this mission has costs, and that in a world of finite resources increased effort here is at the expense of other important defense activities. We accept these trade-offs, and we will do the job."

THE LIC TEAM





LIC

PEACETIME ENGAGEMENT

NATION ASSISTANCE

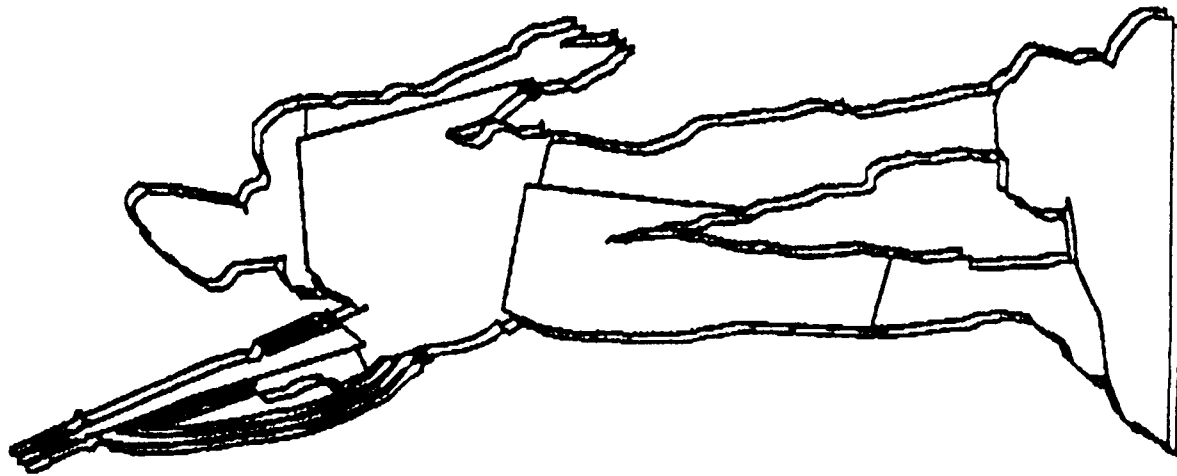
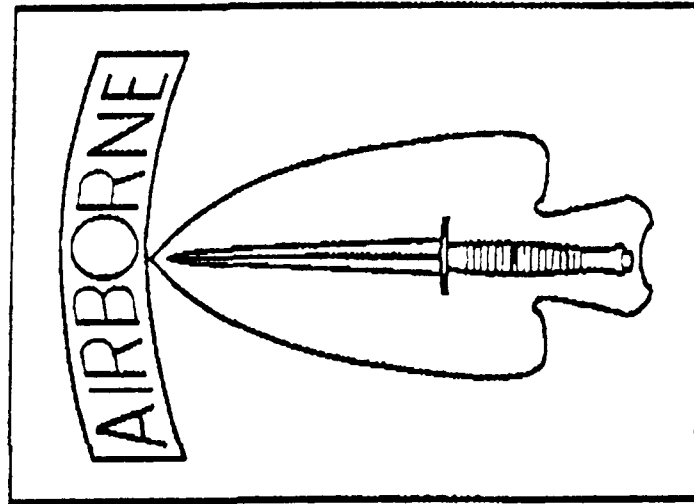
IDAD

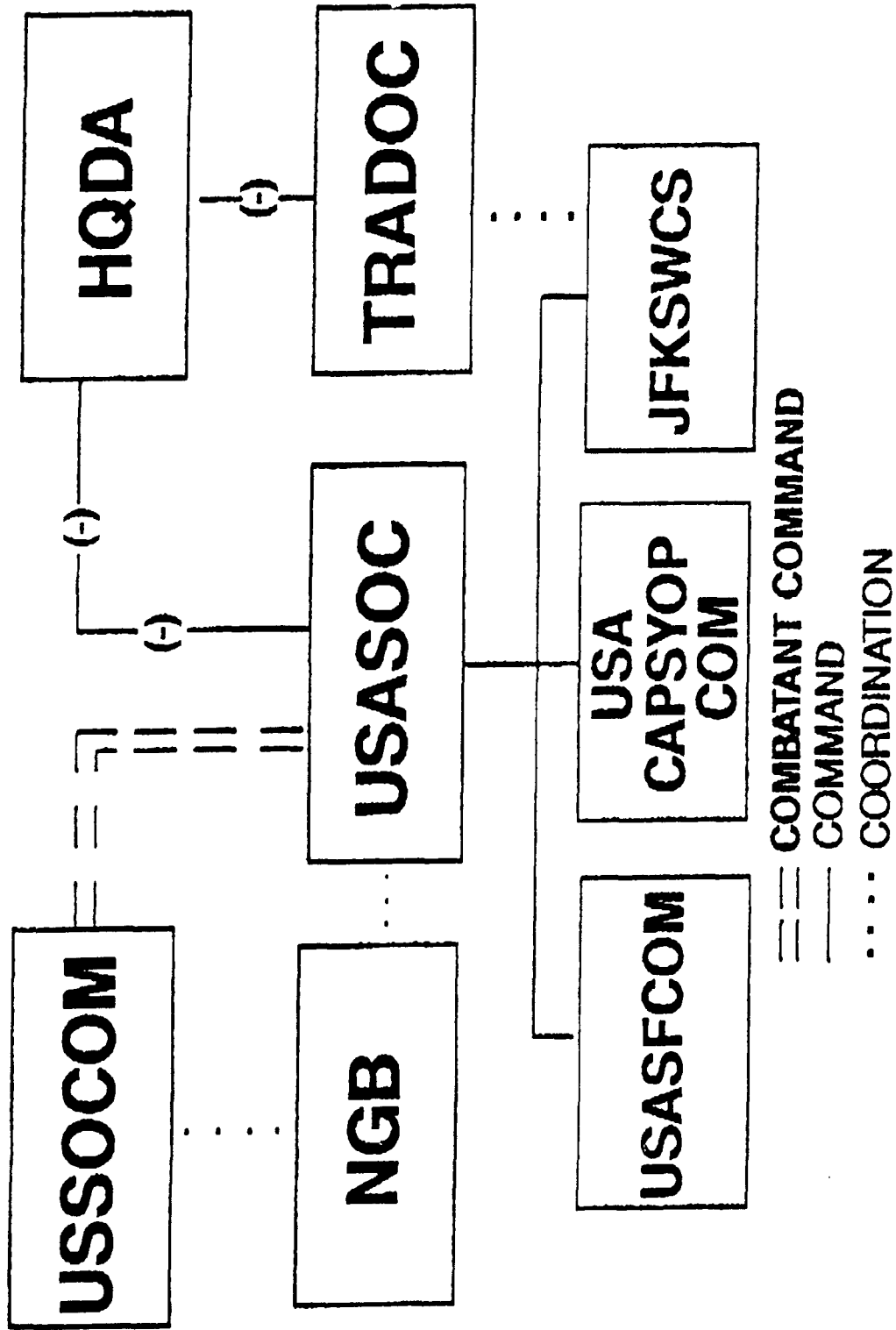
FID

SYNOPSIS OF
SOF CAPABILITIES AND ANALYTIC NEEDS
by LTG MICHAEL SPIGELMIRE

1. The featured speaker of the Low Intensity Conflict Analysis Workshop was LTG Michael F. Spigelmire, Commander of the U.S. Army Special Operations Command (USASOC). He began his presentation with an overview of the USASOC command organization, mission, and components (slides #2-4). Headquartered at Fort Bragg, North Carolina, USASOC has approximately 25,000 personnel who are stationed or performing duties in 30 countries worldwide, to include the U.S. southwest border.
2. The relative importance of the role of the military through the stages of the operational continuum was depicted on slide #7. There is always a military role, its importance obviously heightened during periods of war. In the coming years special operations forces are seen as the forces of the future because of increased emphasis on contingency packages and low intensity conflicts.
3. Characteristic descriptors of war, conflict, and peacetime competition (the normal state) were shown to illustrate the differences of national focus in each of the different conditions (slides #9 and 10). Although an interagency effort toward accomplishment of U.S. national strategy is inherent in each condition, the relative importance of the separate agencies changes with the specific situation and its importance to U.S. interests. The employment of the U.S. military in non-lethal missions will increase in the future.
4. Next discussed were the role of SOF and the SOF imperatives. SOF are not employed indiscriminately. They fully understand not only their mission, but the environment to which they are deployed and the implications of their actions.
5. Recognizing the analytic focus of the workshop, LTG Spigelmire presented his SOF LIC model requirements (slide #14). It is not an easy bill to fill. But, as stated, if we can effectively model LIC factors, we will be on the forefront of predicting tomorrow's events.

UNITED STATES ARMY SPECIAL OPERATIONS COMMAND (USASOC)





MISSION

RECRUIT, TRAIN, EQUIP, ORGANIZE AND VALIDATE ARMY SPECIAL OPERATIONS FORCES (SOF) FOR EMPLOYMENT BY UNIFIED COMBATANT COMMANDS

- COMMAND CONUS-BASED SPECIAL OPERATIONS FORCES AND THE JOHN F. KENNEDY SPECIAL WARFARE CENTER AND SCHOOL

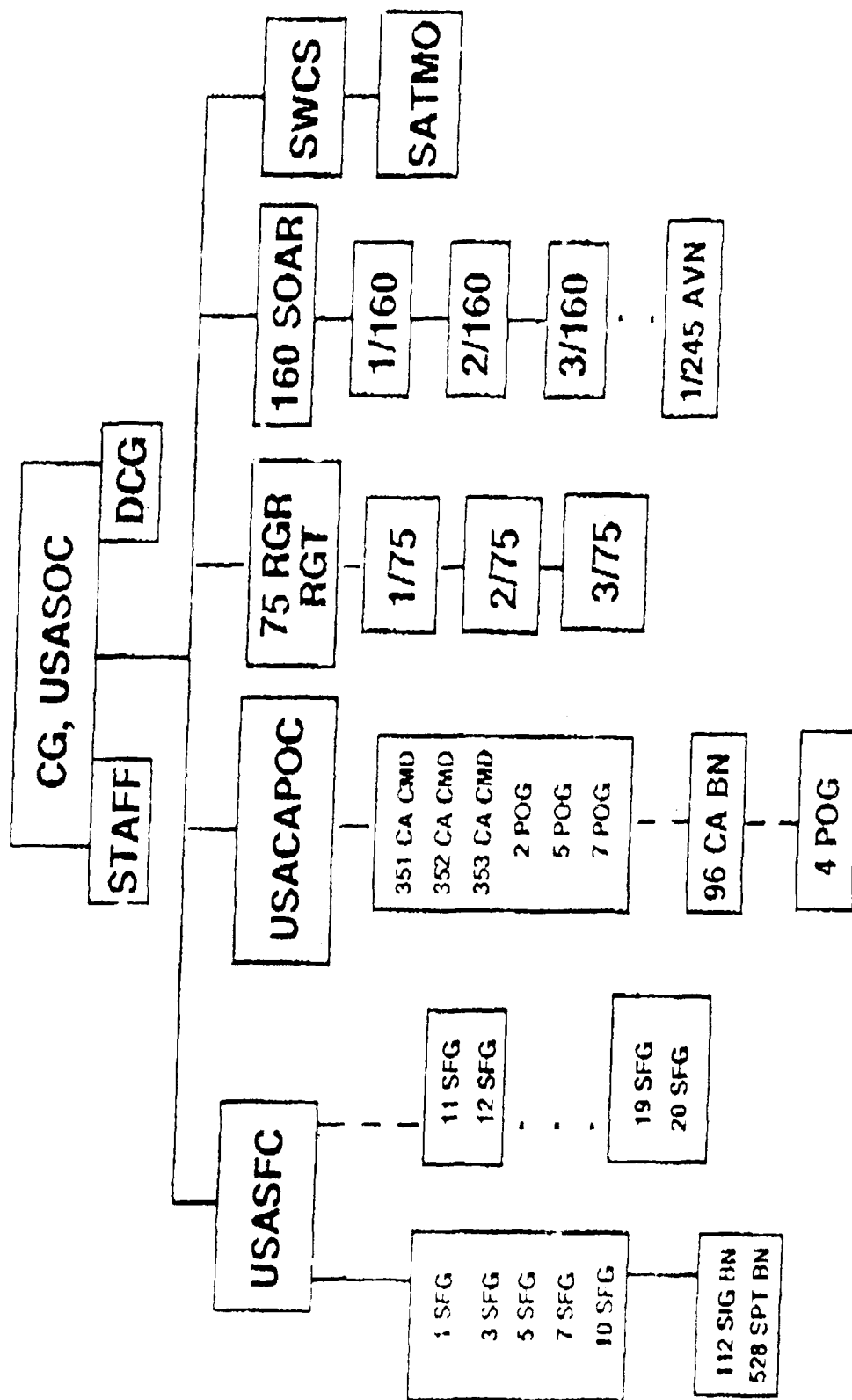
- EXECUTE OPERATIONAL CONTROL OF ARMY RESERVE SPECIAL OPERATIONS FORCES

(ASSUME COMMAND IN 1991)

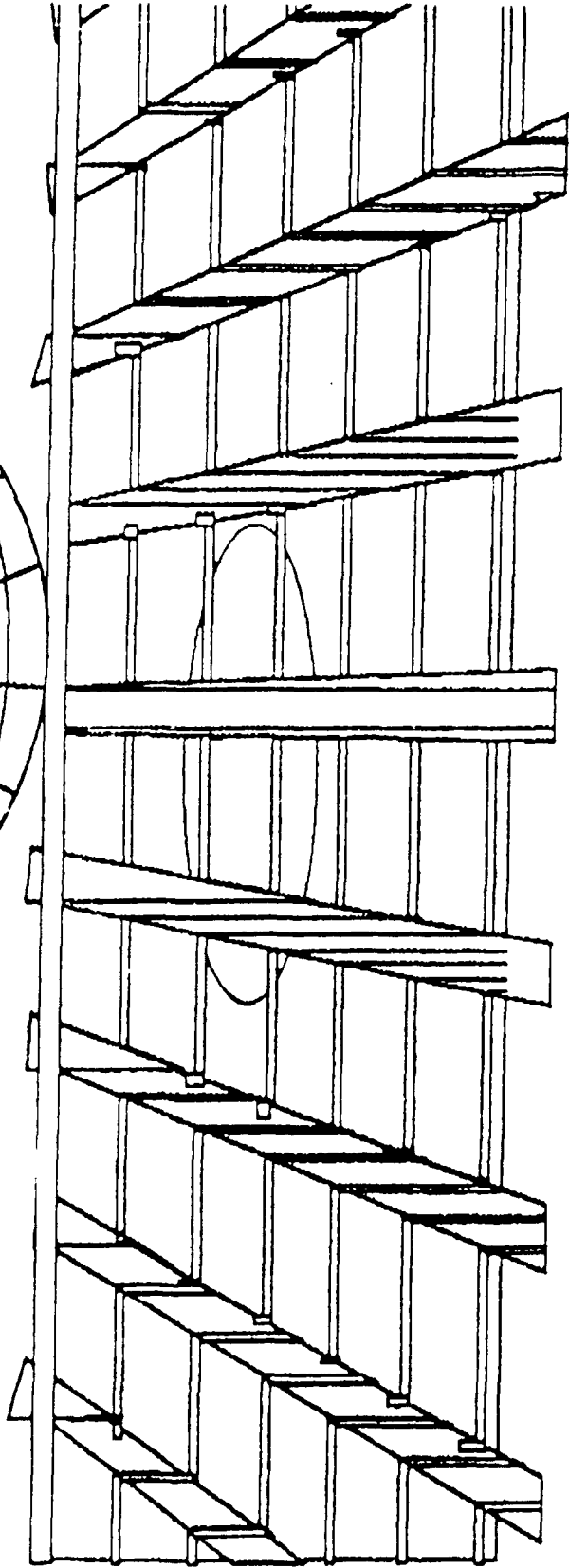
- COORDINATE TRAINING GUIDANCE TO ARMY NATIONAL GUARD BUREAU

- PROVIDE TRAINING GUIDANCE AND STANDARDS TO OVERSEAS-BASED ACTIVE ARMY SOF THRU IN-THEATER COMMANDERS

COMMAND ORGANIZATION



NEW PERSPECTIVES

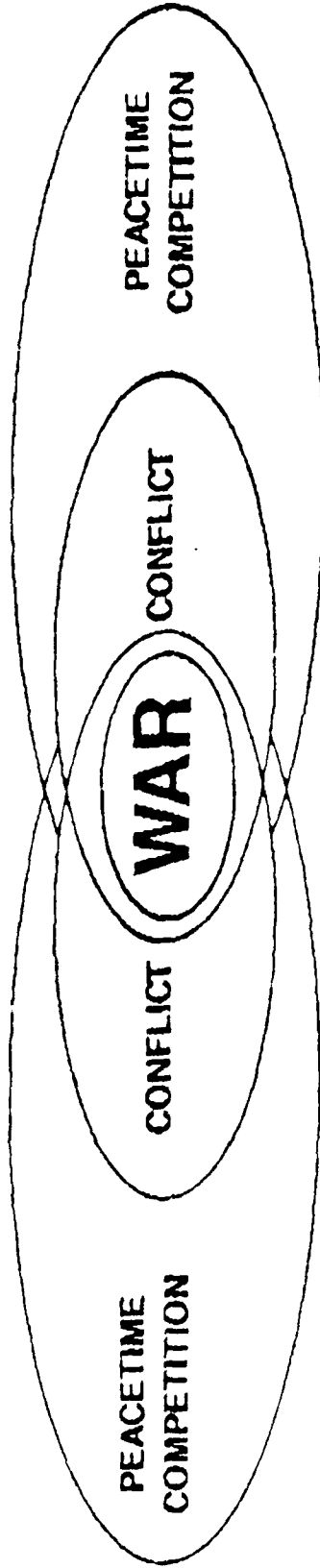


ELEMENTS OF NATIONAL POWER

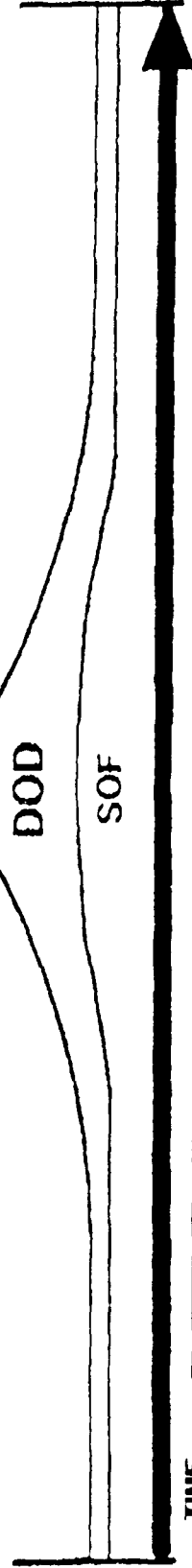
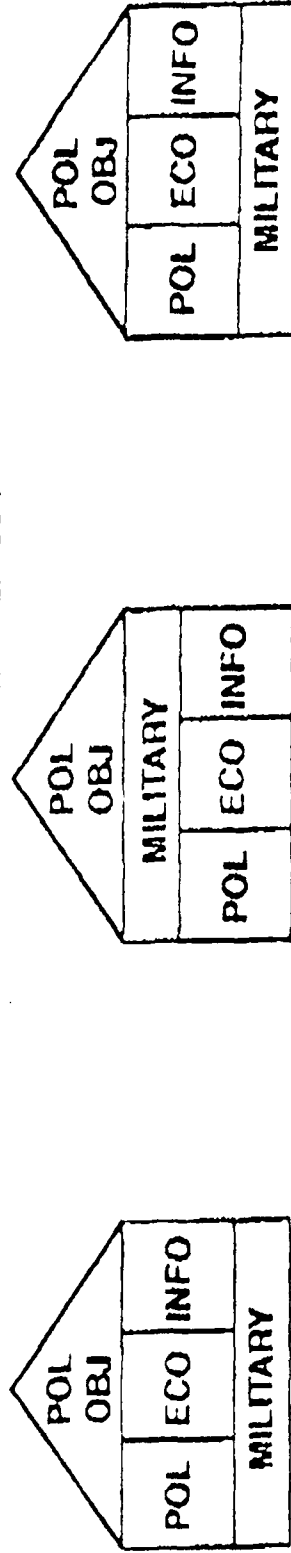
- POLITICAL
- INFORMATIONAL
- ECONOMIC
- MILITARY

Army Special Operations Command

THE OPERATIONAL CONTINUUM



ROLE OF THE MILITARY



Army Special Operations Command

001001 000000



OPERATIONS/TRAINING

DIFFERENCES IN FOCUS

WAR

- NARROW CONCENTRATED THREAT
- DIRECT APPLICATION OF MILITARY FORCE
- CLEAR MILITARY OBJECTIVES
- MEASURABLE RESULTS
- CLEAR CHAIN OF COMMAND
- TOTAL ENGAGEMENT
- EMPHASIS ON WARFIGHTING

CONFLICT

- GLOBAL THREAT
- INDIRECT APPLICATION OF NATIONAL POWER
- POLITICO-MILITARY OBJECTIVES
- SUBJECTIVE RESULTS
- INTERAGENCY & COMBINED EFFORTS IN WHICH THE MILITARY DOES NOT HAVE THE LEAD
- DISCRIMINATE ENGAGEMENT
- EMPHASIS ON NONMILITARY ASPECTS THAT DOMINATE MILITARY OPERATIONS

Army Special Operations Command

DIFFERENCES IN FOCUS

WAR

CONFLICT

PEACETIME COMPETITION (NORM)

- VITAL INTERESTS & VULNERABILITIES
- FORWARD PRESENCE & READINESS
- POLITICO-ECONOMIC OBJECTIVES
- SUSTAINED PROGRESS
- CLEAR STRATEGY
- DETERRENCE
- EMPHASIS ON EXPANDED RELATIONS & SUPPORT TO ALLIED & FRIENDLY NATIONS

Army Special Operations Command

INTERAGENCY EFFORT

CIA

SIA/E

DEFENSE

FBI

DEA

AGRICULTURE

USIA

USAID

NSC



COMMERCE

COAST GUARD

CUSTOMS

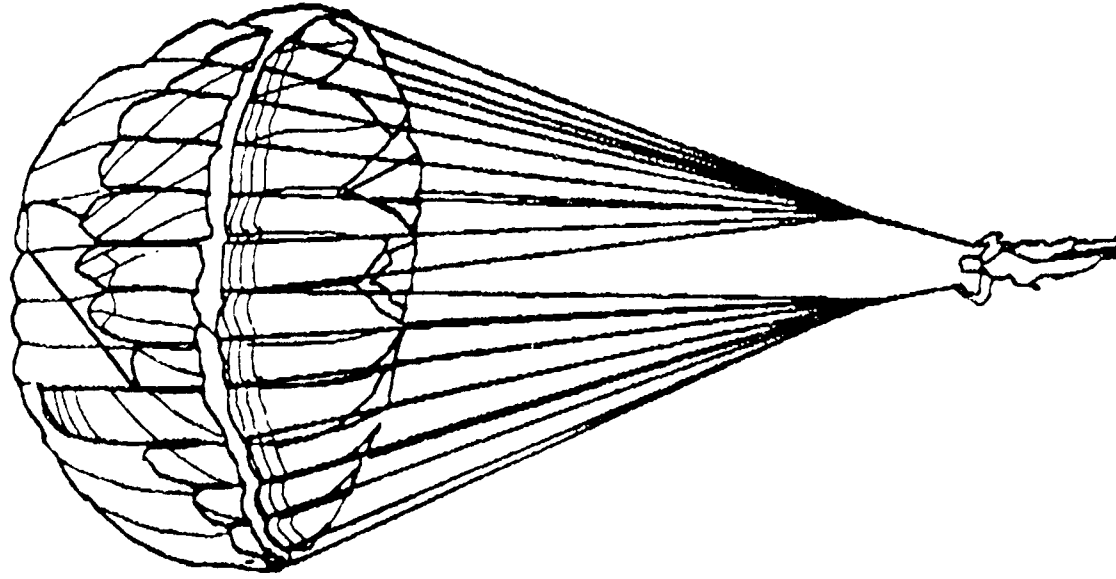
TREASURY

Army Special Operations Command

ROLE OF SOF

- REGIONALLY / CULTURALLY ORIENTED
- LANGUAGE TRAINED
- POLITICALLY ATTUNED
- LOW VISIBILITY APPROACH
- KNOWLEDGE OF INFRASTRUCTURE
- WELL SUITED TO SUPPORT INTRODUCTION OF CONVENTIONAL FORCES, ADVISE, AND COORDINATE RESOURCES

Army Special Operations Command



SOF IMPERATIVES

- UNDERSTAND THE OPERATIONAL ENVIRONMENT
- RECOGNIZE POLITICAL IMPLICATIONS
- FACILITATE INTERAGENCY ACTIVITIES
- ENGAGE THE THREAT DISCRIMINATELY
- CONSIDER LONG TERM EFFECTS
- ENSURE LEGITIMACY AND CREDIBILITY OF SO
- ANTICIPATE AND CONTROL PSYCHOLOGICAL EFFECTS
- APPLY CAPABILITIES INDIRECTLY
- DEVELOP MULTIPLE OPTIONS
- ENSURE LONG-TERM SUSTAINMENT
- PROVIDE SUFFICIENT INTELLIGENCE
- BALANCE SECURITY AND SYNCHRONIZATION

LIC MODEL REQUIREMENTS

- **INTERACTIVE PLAY BETWEEN POLITICS,
MILITARY, ECONOMICS AND CULTURE**
- **NON-LETHAL SOFT FACTORS ARE QUANTIFIED**
- **MODEL IS INTEGRATED, JOINT AND INTERAGENCY**
- **MODEL FOCUS IS ON GENERIC MISSIONS**
- **MODEL IS FED BY COUNTRY SPECIFIED DATABASE**

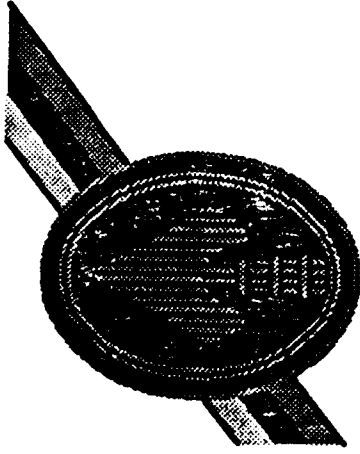
SOF TRUTHS

- HUMANS ARE MORE IMPORTANT THAN HARDWARE
- QUALITY IS BETTER THAN QUANTITY
- SPECIAL OPERATIONS FORCES CANNOT BE MASS PRODUCED
- COMPETENT SPECIAL OPERATIONS FORCES CANNOT BE CREATED AFTER EMERGENCIES OCCUR

Army Special Operations Command

SYNOPSIS OF
JOINT SOF SIMULATION WORKING GROUP
by COL CARLTON ROBERSON

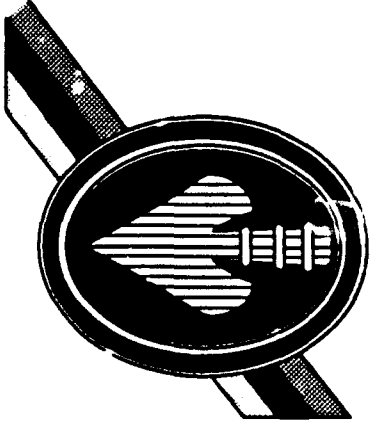
1. COL Roberson explained the missions and structure of the USSOCOM Simulations and Planning Analysis Division, SOJ7-S (slides #3-5). A key element is incorporating SOF play into models used by the services, agencies, and joint commands. It was pointed out that USSOCOM is a supporting CINC, not a war fighter. CINCSOC deploys trained and equipped special operations forces; the theater CINC employs them. Also highlighted was that SOJ7-S manages the Modern Aids to Planning Program (MAPP), which is alive and well. All of the stated missions were of particular interest to the LICAWS because of the direct relationship to the immediate and long-term goals of the workshop.
2. Turning the focus to the SOF Simulations Working Group (SOFSIM), its purpose, functions and membership were presented (slides #6-8). Naturally, there is a distinct special operations flavor in all three areas.
3. It was discovered early (mid-1989) that there were not very many models for SOF. Several existing models were reviewed to see how SOF play might be incorporated. Engineering change proposals were submitted and modifications recommended. Slide #9 shows the current status of training model efforts. Considerable progress is being made.
4. Current SOF analysis requirements (slide #10) cover a broad spectrum of functional areas--planning, force structure, policy, strategy, doctrine, tactics, deployment, and employment. Current actions address all those areas to some degree. Progress is certainly being made toward bringing SOF into the force.



US60FA02.IMG 07/17/90:EBC

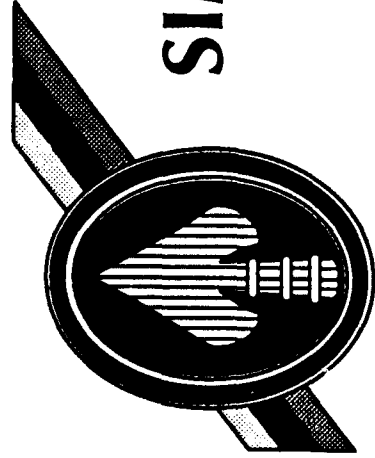
USSOCOM

SIMULATIONS AND PLANNING ANALYSIS DIVISION (SOJ7-S)



OUTLINE

- **USSOCOM SOJ7-S MISSION**
- **BACKGROUND**
- **SOFSIM WORKING GROUP**
- **TRAINING ACTIONS**
- **PLANNING AND ANALYSIS ACTIONS**

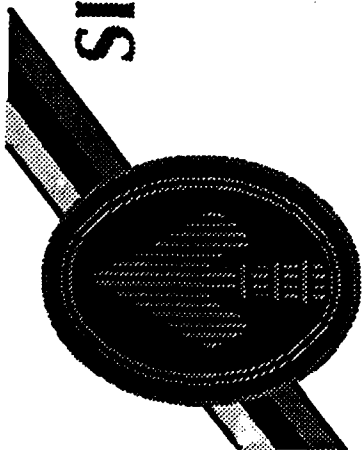


i791ee04.n08 5/31/91:DJP

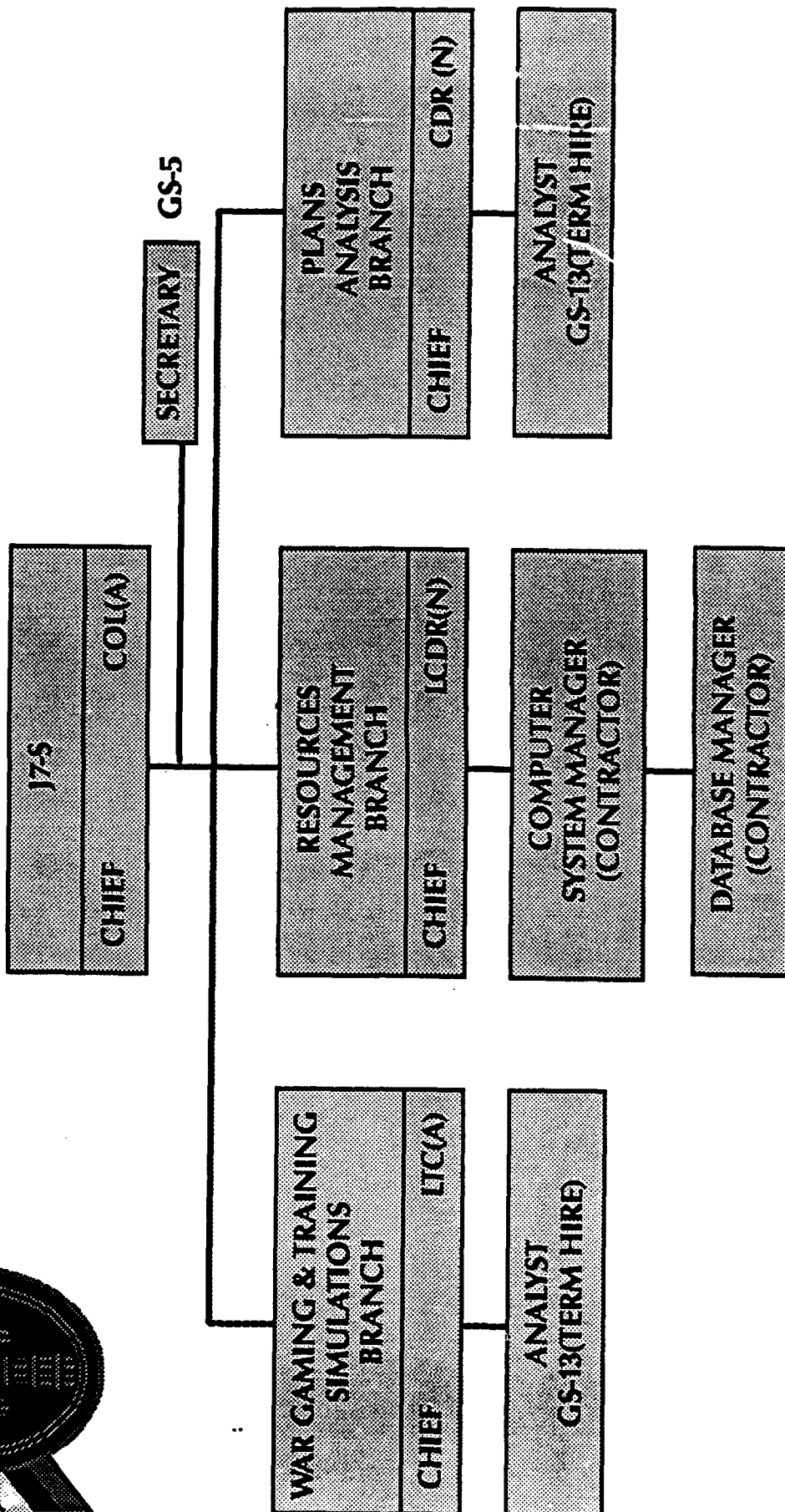
SOJ7-S SIMULATIONS AND PLANNING ANALYSIS DIVISION

MISSION

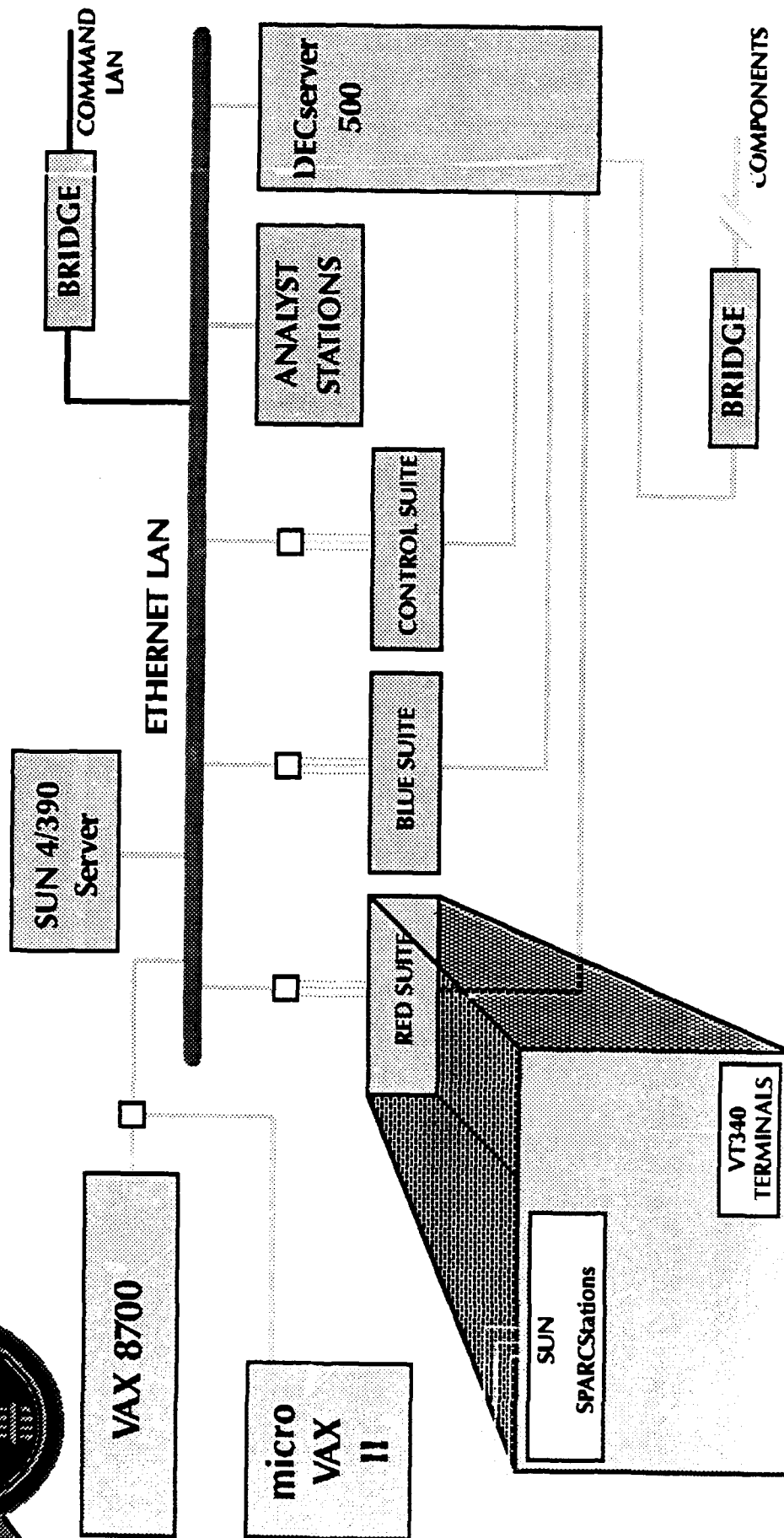
- DEVELOPS SO/LIC SIMULATION MODELS AND WAR GAMES TO MEET SOF PLANNING, ANALYSIS AND TRAINING REQUIREMENTS
- COORDINATES THE MODIFICATION OF EXISTING SERVICE, AGENCY AND JOINT COMMAND MODELS TO INCORPORATE SOF PLAY
- MANAGES THE MODERN AIDS TO PLANNING PROGRAM (MAPP)
- MANAGES THE SOF SIMULATIONS WORKING GROUP
- PROVIDES OPERATIONS RESEARCH/SYSTEMS ANALYSIS EXPERTISE AND TOOLS TO THE USSOCOM STAFF AS REQUIRED

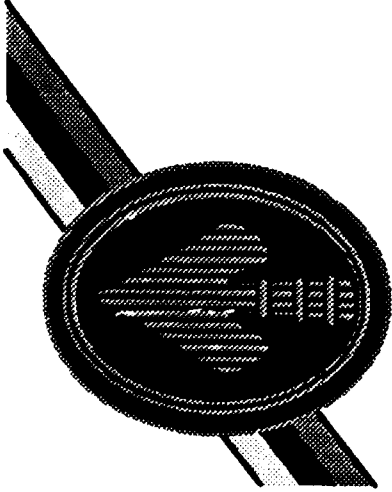


SIMULATIONS AND PLANNING ANALYSIS DIVISION



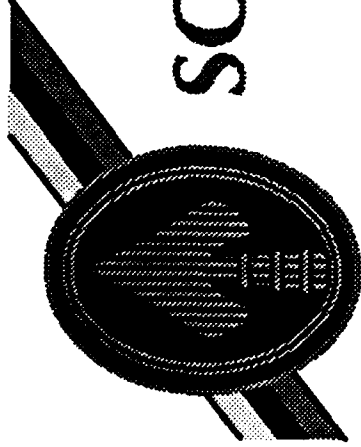
HARDWARE CONFIGURATION





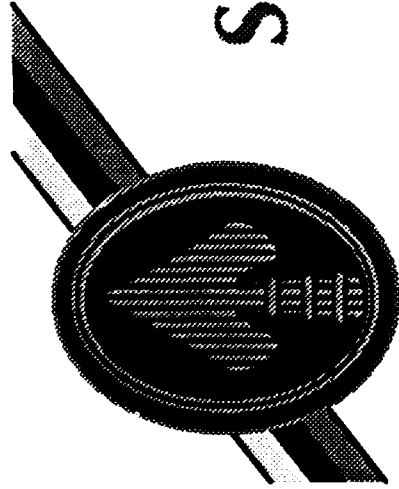
SOFSIM WG PURPOSE

- ASSIST SOF OPERATIONAL COMMANDERS AND STAFF IN IMPROVING PLANNING, ANALYSIS, TRAINING AND MISSION REHEARSAL THROUGH THE USE OF SIMULATORS AND SIMULATIONS/MODELS.
- PROVIDE A FORUM FOR THE EXCHANGE OF INFORMATION AND COORDINATION OF SOF SIMULATION AND SIMULATION/MODEL PROGRAMS.



SOFSIM WG FUNCTIONS

- CONSOLIDATE/CENTRALIZE SOFSIM REQUIREMENTS
- IDENTIFY, REVIEW AND PRIORITIZE SOFSIM REQUIREMENTS FOR
 - MODIFICATIONS TO EXERCISE SUPPORT MODELS
 - DEVELOPMENT OF MODELS
 - FAMILIARIZING CONVENTIONAL COMMANDERS ON USE OF SOF
 - SIMULATION, MODELING AND SIMULATOR HARDWARE, SOFTWARE AND TRAINING
- DEVELOP/MAINTAIN SOFSIM PROGRAM MASTER PLAN
- ADVISE SUPPORTED COMMANDERS ON SOF ENHANCEMENTS TO NON MFP-11 SIMULATIONS AND MODELS



SOFSIM WG MEMBERSHIP

USSOCOM STAFF

JSOC

JWC

USCINCENT & SOCCENT

USCINCEUR & SOCEUR

USCINCLANT & SOCLANT

USCINCSO & SOCSO

USCINCPAC & SOCPAC

CINCUNC/CFC

USASOC

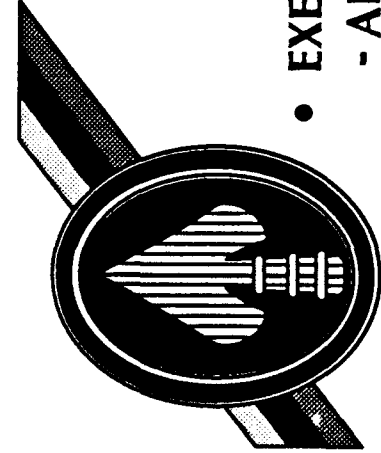
AFSOC

NAVSPEC WAR COM

USAJFK SWCS

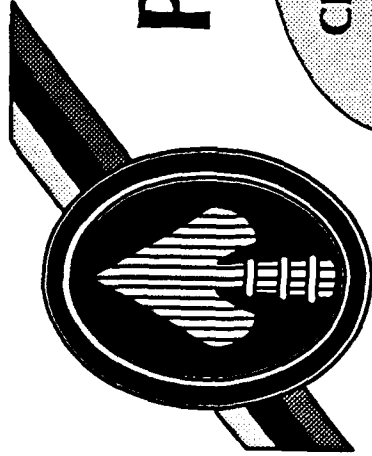
USAFSOS

NAVSPEC WAR CEN



TRAINING

- EXERCISE SUPPORT AND TRAINING SYSTEMS
 - ARMY FAMILY OF SIMULATIONS (FAMSIM)
 - CORPS BATTLE SIMULATION (CBS) CHANGE PROPOSAL
 - REVIEW/STUDIES (BBS, JANUS, PANTHER, CSSTSS)
- TACSIM MODIFICATIONS.
- AIR FORCE AWSIMS STUDY
- NAVY ENWGS STUDY
- JOINT THEATER LEVEL SIMULATION (JTLS) CHANGE PROPOSAL
- SOF FORCE/EQUIPMENT DATABASE FOR MODELS
- JOINT SPECIAL OPERATIONS AWARENESS PROGRAM (JSOAP)
 - ONE DAY SEMINAR WAR GAME
 - THEATER CINCS AND SENIOR SERVICE COLLEGES
- SMALL UNIT/TEAM/INDIVIDUAL TRAINING SIMULATORS
- OTHER JCS SPONSORED WAR GAMES
 - COORDINATE PLAYER SUPPORT
 - ASSIST IN SCENARIO DEVELOPMENT



PLANNING AND ANALYSIS

CINCSOC DEPLOYS
TRAINED AND EQUIPPED
SPECIAL OPERATIONS
FORCES

THEATER CINC
EMPLOYS
SPECIAL OPERATIONS
FORCES

- **ANALYSIS REQUIREMENTS**

- LONG RANGE PLANNING
- FORCE STRUCTURE/DEVELOPMENT MFP-11
- POLICY/STRATEGY/DOCTRINE/TACTICS ANALYSIS
- DEPLOYMENT PLAN TIMING/EFFECTIVENESS
- EMPLOYMENT PLAN EFFECTIVENESS

- **CURRENT ACTIONS**

- SPECIAL OPERATIONS MISSION INTEGRATION CAPABILITY (SOMIC)
- SPECIAL OPERATIONS PLANNING & REHEARSAL SYSTEM (SOFPARS)
- USSOCOM FORCE DEVELOPMENT PROCESS STUDY
- SOF ANALYSIS REQUIREMENTS STUDY (PEACETIME LIC REGIONAL CONTINGENCY)
- MODERN AIDS TO PLANNING PROGRAM PARTICIPATION/SUPPORT

SYNOPSIS OF
LIC ANALYTIC INVENTORY OVERVIEW

by LTC HARRY GOLDING

1. This brief presentation displayed a matrix of LIC-oriented models and their characteristics. The last two models listed, Contingency Force Analysis Wargame (CFAW) and Political-Military (POL-MIL), are not LIC models. They were included because they are integral to the Conflict Analysis Center (CAC), the CAA lead division for LIC and cosponsor of the workshop.
2. The reference for the material included in the matrix (except for the POL-MIL entry) is the Catalog of Wargaming and Military Simulation Models, 11th Edition, September 1989, by the Force Structure, Resource, and Assessment Directorate (J-8). An Index Abbreviation Key is also included.
3. There are known models, simulations, and games not included. Four are the Joint Special Operations Awareness Program (JSOAP), Special Operations Planning & Rehearsal System (SOPARS), Special Operations Mission Integration Capability (SOMIC), and Regional Development Simulation System (RDSS). They were not included in the referenced Catalog, and no individual model extracts were available.
4. A more detailed comparative analysis of the model characteristics is planned. Purpose of the analysis is to develop a matrix showing the purpose, strengths, and weaknesses of each model. The results can be used to create a structured format allowing prospective users to select the model best applicable to their individual needs. These results can also be used as background to determine the LIC characteristics and capabilities desired to be included in the CAC CFAW enhanced model, with follow-on applications to its successor, Next Game (NXG).

LIC ANALYTICAL INVENTORY

| NAME OF MODEL | PURPOSE | DESCRIPTION | | | | | CONSTRUCTION | | | SIDES |
|---------------|-------------------------|----------------|-------------|-------------------------------|-------------------|-------------------------------------|---------------------|-------------------|-------------------------|-------------------------------|
| | Function of Model | Domain | Span | Environment | Force Composition | Scope of Conflict | Human Participation | Timing Processing | Treatment of Randomness | |
| BBS | TR | A,L | TH | DT, FOR, MET | COMB, JF | CONV | REQ-D, P | DYN-TS | STO | 2-A-R |
| ICAN | A-RE | User Specified | User Specif | User Specified | User Specified | User Specified | REQ-D, P | STAT | DET | 1 |
| JANUS 4 | A-RE-WS T/E-ED | A,L | SECT | CF, D/N, DT, MET | COMB, JF | CH, CONV, NUC | NR-INT | DYN-ES | STO-MC | 2-A-R |
| JANUS / R | A-RE-FCR A-RE-WS | A,L | LOC | DT, TD, TER, W | ELEM | CONV | REQ-D | DYN-TS | STO-MC | 2-S |
| JANUS (T) | A-RE-CD T/E-ED | A,L,S | REG | CF, D/N, TER, TF, VEG, W | COMB, JF | CH, CONV | REQ-D | DYN-ES | STO | 2-A-R |
| CBS (JESS) | T/E-ED | A,L,N | REG / TH | BAR, HEX, TD, W, TF, URB, VEG | COMB, JF | CH, CONV, NUC | REQ-D, P | DYN-TS | N/A | 2-A |
| JTLS | A-OST, A-RE-PCR, T/E-ED | A,L,N | TH | BAR, HEX TD, TF, W | COMB, JF | CH, CONV, NUC | REQ-D, P | DYN-ES | DET, MC STO-DC | 2-A-R |
| PANTHER | T/E-ED | A,L,S | LOC / REG | D/N, L, TER, W | COMP | CONV | REQ-D, P | DYN-TS | STO-MC | 3; Red/Blue-S or A, Gray-A-NR |
| LICGS | A-OST, T/E | POL | REG | N/A | CONC | CONV, UNC | REQ-D, P | DYN-ES DYN-TS | DET | 3+, R or RN |
| SEES 1.1 | A, TR | L | LOC | CF, D/N, DT, W | ELEM | CH, UNC | NR-INT | DYN-ES | STO-MC | 2-A-R |
| SLIC | A | ABS | LOC | N/A | ELEM | POL, UNC | NR | DYN | DET, STO | 2 |
| SOTACA | A-OST | User Specified | User Specif | BAT | Any Mix | BIO, CH, NUC, POL CONV, RA, SPEC | REQ-D, P | DYN-TS | DET | 2-S |
| CFAW | A-OST | A,L,N | REG - TH | D/N, HEX, TER, TF, W | COMB, JF | CH, CONV RA, NUC | REQ-D | DYN-TS | STO-MC | 2-S |
| POL-MIL | A-OST | User Specified | User Specif | User Specified | CONC | User Specified | REQ-A, D, I | DYN-ES | N/A | 3, A or S, R or NR |

REFERENCE 'except POL-MIL':
Catalog of Wargaming and Military Simulation Models,
11th Edition, September 1989, J 8.

REFERENCE (except POL-MIL):

Catalog of Wargaming and Military Simulation Models, 11th Edition, September 1989, J 8.

PURPOSE

Function of Model

| | |
|----------|---|
| A | analysis |
| A-OST | analysis, operation support tool (decision aid) |
| A-RE | analysis, research and evaluation tool |
| A-RE-CD | analysis, research and evaluation tool dealing with combat development |
| A-RE-FCR | analysis, research and evaluation tool dealing with force capability and requirements |
| A-RE-WS | analysis, research and evaluation tool dealing with weapon systems education |
| EDU | training and education |
| T/E | training and education, exercise driver |
| T/E-ED | training and education, skills development |
| T/E-SD | training |
| TR | |

CONSTRUCTION

Human Participation

| | |
|--------|---|
| NP | not permitted |
| NR | not required |
| NR-INT | not required, model interruptible |
| NR-SC | not required, model has scheduled changes |
| REQ | required |
| REQ-A | required for analysis |
| REQ-D | required for decisions |
| REQ-P | required for processes |
| REQ-DP | required for decisions and processes |
| REQ-GR | required for graphics |
| REQ-I | required for input |
| REQ-ID | required for interactive decisions |
| REQ-SU | required for setup |
| UI | user interactive |

DESCRIPTION

Domain

| | |
|-----|----------|
| A | air |
| AB | airbase |
| ABS | abstract |
| CO | coast |
| L | land |
| N | naval |
| POL | politics |
| S | sea |
| SP | space |
| US | undersea |

Span

| | |
|--------|--------------|
| GEO | geographic |
| area | area |
| GLOBAL | global |
| IND | individual |
| INTER | intertheater |
| INTR | intratheater |
| LOC | local |
| REG | regional |
| SECT | sector |
| TH | theater |

Environment

| | |
|-----|-------------------|
| A | air |
| BAR | barrier |
| BAT | battlefield |
| CAN | canalization |
| CF | cultural features |
| COM | communications |
| DES | deserts |
| D/N | day and night |
| DT | digitized terrain |
| EAR | earth |

Scope of Conflict

| | |
|--------|----------------------|
| BIO | biological |
| CH | chemical |
| CONV | conventional |
| DET | detection |
| ELEC | elec. combat/warfare |
| KIN | kinetic |
| LAS | laser |
| MIN | mines |
| NONSTR | nonstrategic |
| NUC | nuclear |
| POL | political |
| RA | rear area |
| SPEC | special |
| STRAT | strategic |
| UNC | unconventional |
| VER | verification |

SIDEDNESS

Number and Type of Sides

| | |
|--------|--|
| 1 | one-sided |
| 1NR | one side nonreactive (same for reactive) |
| 2 | two-sided |
| 3 | three-sided |
| A | asymmetric |
| NR | nonreactive |
| R | reactive |
| RED NR | RED side nonreactive (same for BLUE side) |
| S | symmetric |

Time Processing : Treatment of Randomness

| | dynamic | DET | deterministic |
|--------|---------------------|--------|---|
| DYN | dynamic | DET-EV | deterministic, generates value as a function of an expected value |
| DYN-CF | closed form | | stochastic |
| DYN-ES | dynamic, event-step | STO | stochastic, direct computation |
| DYN-TS | dynamic, time-step | STO-DC | stochastic, Monte Carlo |
| STAT | static | STO-MC | |

EXTRACTS OF LIC MODELS

1. **EXTRACTS.** The following pages are Data Collection Sheets, or extracts, of LIC models found in the Catalog of Wargaming and Military Simulation Models. The models selected for inclusion correspond to those listed in the LIC analytical inventory (Enclosure 11), except Contingency Force Analysis Wargame (CFAW) and Political-Military (POL-MIL). The latter two are not specifically LIC models.

2. **INSTRUCTIONS.** The next four pages are the instructions for entering the appropriate information in the extracts. They were provided to the organizations that prepared inputs for the catalog. These instructions are included to help readers better understand the extract data entries. The separate model extracts, two pages each, follow the instructions.

DATA COLLECTION SHEET INSTRUCTIONS

TITLE: Full name followed by acronym.

MODEL TYPE:

Choose either ANALYSIS, e.g., models which serve as theoretical, conceptual tools for understanding and improving strategy or TRAINING AND EDUCATION, e.g., models aimed at improving actual troop performance or at providing lifelike experiences for the sake of educating users.

PROPONENT: Organization primarily responsible for maintaining model.

POINT OF CONTACT: List name and phone number of person from whom additional information may be obtained.

PURPOSE:

This section should contain a brief narrative covering the following elements:

A. If ANALYSIS, is it a RESEARCH & EVALUATION TOOL or an OPERATION SUPPORT TOOL (DECISION AID)?

1. If RESEARCH & EVALUATION TOOL, does it:

a. deal with WEAPONS SYSTEMS? If so, does it deal with (a) SYSTEMS DEVELOPMENT or (b) SYSTEMS EFFECTIVENESS against targets and their efficient mix with support systems?

OR b. deal with FORCE CAPABILITY AND REQUIREMENTS? If so, does it deal with (a) COURSES OF ACTION ASSESSMENT, (b) MIX, (c) EFFECTIVENESS, or (d) RESOURCES PLANNING?

OR c. deal with COMBAT DEVELOPMENT? If so, does it deal with (a) CURRENT OR NEW DOCTRINE, (b) COMPETING STRATEGIES, or (c) POLICY STUDY?

2. If OPERATIONS SUPPORT TOOL (DECISION AID) there are no further sub-classifications.

B. If TRAINING AND EDUCATION, is model used for SKILLS DEVELOPMENT or as an EXERCISE DRIVER?

1. If for SKILLS DEVELOPMENT, does it develop the skills of (a) a TEAM or (b) an INDIVIDUAL?

2. If an EXERCISE DRIVER, is it (a) a FIELD TRAINING EXERCISE DRIVER, (b) a COMMAND POST EXERCISE DRIVER, (c) a SEMINAR EXERCISE DRIVER, or (d) an INDIVIDUAL EXERCISE DRIVER?

DESCRIPTION:

In this section you will classify the model according to its qualities, which are the real entities and processes that the model represents (Use only short answers to complete this section.)

A. DOMAIN: The physical or abstract space in which the entities and processes operate. Can be land, sea, air, space, undersea, a combination of any of the above, or an abstract domain.

B. SPAN: Scale, e.g., global, theater, regional, local, or individual.

C. ENVIRONMENT: Texture or detail, e.g., terrain relief, weather, time of day, terrain cultural features (such as cities or farmland), and sea states.

D. FORCE COMPOSITION: Mix of forces which can be portrayed by the model, e.g., combined forces, joint forces, component, element, etc.

E. SCOPE OF CONFLICT: Category of weapons, e.g., conventional, unconventional, chemical, biological, nuclear, chemical-biological-nuclear, special, and rear-area (either Red or Blue).

F. MISSION AREA: Recognized combinations of weapons and procedures used to accomplish a specific objective, e.g., sea control, close air support, air-lift, and indirect artillery.

G. LEVEL OF DETAIL OF PROCESSES AND ENTITIES: Entity: What is lowest entity modeled? Can be, e.g., anything from a numbered air force unit to an individual aircraft, from an army to a single soldier, or from an individual tank to a task force. Processes such as attrition, communications, and movement affect the above entities. The description of the level of detail must contain qualifiers that address the processes in the model.

CONSTRUCTION: (Use only short answers to complete this section.)

A. HUMAN PARTICIPATION: REQUIRED or NOT REQUIRED?

1. If REQUIRED, is HUMAN PARTICIPATION (a) FOR DECISIONS, (b) FOR PROCESSES, or (c) FOR BOTH?

a. If REQUIRED FOR DECISIONS, does it (a) WAIT FOR A DECISION or (b) CONTINUE TO RUN WITHOUT A DECISION (e.g., SIMULATORS)?

2. If NOT REQUIRED, (a) is the model INTERRUPTABLE, (b) does it have SCHEDULED CHANGES, or (c) is human participation NOT PERMITTED?

B. TIME PROCESSING: Is model DYNAMIC (treats time-dependent processes) or STATIC (no dependence on time)?

1. If DYNAMIC, is it (a) TIME STEP, (b) EVENT STEP, or (c) CLOSED FORM?

2. If STATIC, there are no further sub-classifications.

C. TREATMENT OF RANDOMNESS: Is model STOCHASTIC or DETERMINISTIC?

1. If STOCHASTIC, is it (a) DIRECT COMPUTATION or (b) MONTE CARLO?
2. If DETERMINISTIC, (a) does it GENERATE A VALUE AS A FUNCTION OF AN EXPECTED VALUE or (b) is it BASICALLY DETERMINISTIC (NO RANDOMNESS)?

D. SIDEDNESS: HOW MANY COLLECTIONS OR ALLIANCES OF RESOURCES ARE WORKING IN OR THROUGH THE MODEL TOWARD A COMMON GOAL?

1. If ONE-SIDED, there are no further sub-classifications.
2. If TWO-SIDED, is it (a) SYMMETRIC or (b) ASYMMETRIC?
 - a. If SYMMETRIC, there are no further sub-classifications.
 - b. If ASYMMETRIC, (a) is ONE SIDE NONREACTIVE or (b) are BOTH SIDES REACTIVE?
3. If THREE- OR MORE-SIDED, is it (a) SYMMETRIC or (b) ASYMMETRIC?
 - a. If SYMMETRIC, there are no further sub-classifications.
 - b. If ASYMMETRIC, (a) is ONE OR MORE SIDES NONREACTIVE or (b) are ALL SIDES REACTIVE?

LIMITATIONS: For example, number of targets, no geography, etc.

PLANNED IMPROVEMENTS/MODIFICATIONS:

INPUT:

For example, scenario, weapons characteristics, troop unit size, arrival dates.

OUTPUT: Computer printouts, plots, raw data, statistically analyzed data.

HARDWARE AND SOFTWARE:

Computer(OS): Type of computer and operating system

Storage: Minimum storage required

Peripherals: Printers, graphics plotters, etc.

Programming Language:

Documentation: Include DDC accession numbers if assigned

SECURITY CLASSIFICATION: Model without data

GENERAL DATA:

Date Implemented:

Data Base: time needed to prepare data base

CPU Time per Cycle:

Data Output Analysis:

GENERAL DATA (continued):

Frequency of Use:

Users: List primary organizations which have or are using the model

Comments: Supercessions, linkage of model to other models, etc.

NOTES:

1. The data for a single entry should not exceed two pages. There should be no more than 55 lines per page and 79 spaces per line.
2. Data contained in this summary must be unclassified.

TITLE: BBS (COMBAT-SIM)

MODEL TYPE: Training.

PROPONENT: TRAC-FLVN, Fort Leavenworth, KS 66027-5200.

POINT OF CONTACT: CPT Stover, (913) 684 2859, AV 552 2859.

PURPOSE: BBS (COMBAT-SIM) is designed to provide battalions, brigades, their commanders, and their commanders' staffs an environment in which to train in the execution of airland battle doctrine at the tactical level of war.

DESCRIPTION:

Domain: Land and air.

Span: Accommodates any theater depending on the data base. Scenarios of Europe, Korea, Sinai, and NTC are available.

Environment: Digitized, hex-based. Models deserts, mountains, forests, and jungles. Models weather conditions, including visibility, cloud cover, and precipitation.

Force Composition: Joint and combined forces, BLUE and RED.

Scope of Conflict: Conventional.

Mission Area: All conventional missions except unconventional warfare.

Level of Detail of Processes and Entities: Individual weapon system.

CONSTRUCTION:

Human Participation: Required for decisions and processes.

Time Processing: Dynamic, time-step model.

Treatment of Randomness: Stochastic.

Sidedness: Two-sided, asymmetric, both sides reactive.

LIMITATIONS: Limited to play terrain types available as digitized data with video disk display.

PLANNED IMPROVEMENTS AND MODIFICATIONS: N/A.

INPUT: Movement and conflict order, unit names and locations, resupply.

OUTPUT: Conflict resolution, battle damage, personnel and logistics losses, alerts, reports, and graphic battle depiction.

HARDWARE AND SOFTWARE:

Computer: Designed to run on DEC computer with a VMS operating system.

Storage: Minimum storage required: 71 MB.

Peripherals: Terminals, printers, TV, IEV graphics processor, and mouse.
Color Graphics: IEV-60 graphics coprocessor.
Language: MODULA-2.
Documentation: N/A.

SECURITY CLASSIFICATION: Unclassified.

GENERAL DATA:

Date Implemented: 1988.

Data Base: N/A.

CPU time per Cycle: Depends on the size of the data base and the number of players.

Data Output Analysis: Postprocessor aids in analysis output, raw data, graphics display, and time periods.

Frequency of Use: Continuous.

Users: Currently being fielded.

Comments: N/A.

TITLE: ICAN - Integrated Cost and Need

MODEL TYPE: Analysis.

PROPOSER: ANSER Inc, 1215 JEFFERSON DAVIS, SUITE 800, ARLINGTON, VA 22204

POINT OF CONTACT: Mason Washington, (703) 685-3167.

PURPOSE: ICAN develops, maintains, and fosters analytic use of resource allocation and capability assessment models. ICAN models integrate multi-objective needs analysis with program resource analysis. These models serve as a mission capability assessment tool to assess the impact of cost or resource quantity changes.

DESCRIPTION:

Domain: Any domain as specified by the user.

Span: Any span as specified by the user.

Environment: Any environment as specified by the user.

Force Composition: Any force composition as specified by the user.

Scope of Conflict: Any scope of conflict as specified by the user.

Mission Area: Any mission area as specified by the user.

Level of Detail of Processes and Entities: Any level of detail supported as specified by the user. Models are static and discrete time unit driven. The hierarchical organization can accommodate 15 levels with 10 items per level. Appropriate allocation algorithm may need programming. ICAN currently uses a declining marginal returns algorithm. Resources are allocated to the most important objectives where the most important objective is achieved. Once the objective is achieved or resource expanded, the next best resource and objective allocation is addressed. Resource attrition and objective effectiveness are input by user. Model may run for up to 12 time periods.

CONSTRUCTION:

Human Participation: Required for decisions and processes.

Time Processing: Static.

Treatment of Randomness: Deterministic.

Sidedness: One-sided.

LIMITATIONS: Five hundred types of objectives maximum allowed for specification in the objectives tree. Two hundred fifty types of resources maximum allowed for resource specifications.

PLANNED IMPROVEMENTS AND MODIFICATIONS: Provide another allocation algorithm that is rule-based. Enhance the resource and cost interface for program cost analysis of resources. Improve report generation function to furnish better graphics and analytic report features.

INPUT: Objectives (names, weights, relationships, and quantities). Resources (names, weights, and relationships). Resource to objective allocation description. Resource effectiveness, sorties available, and resource attrition).

OUTPUT: Produces output of model description (tree diagrams, file dumps, etc.). Also produces computer reports or graphical depictions of calculated objective capabilities (summary and per objective). Also shows allocation results during model execution.

HARDWARE AND SOFTWARE:

Computer: Designed to run on IBM AT microcomputer with a MS DOS operating system. Transportable to VAX computer with a VMS operating system or UNIX based computer.

Storage: Minimum of 20 MB hard disk and 640K main memory.

Peripherals: 1 printer.

Language: "C."

Documentation: User's manual.

SECURITY CLASSIFICATION: Unclassified.

GENERAL DATA:

Date Implemented: 1988.

Data Base: Population of data bases is dependent on the size of the model.

CPU time per Cycle: Dependent on the data size of the model. Large models will usually take less than an hour to run.

Data Output Analysis: N/A.

Frequency of Use: Designed for frequent use of trade-off and sensitivity analysis of resource allocation option.

Users: Currently under final preparation for USSOCOM and SAF/LERD.

Comments: None.

TITLE: Janus 4

MODEL TYPE: Analysis and training.

PROPOSER: Conflict Simulation Laboratory, Lawrence Livermore National Laboratory, P.O. Box 808 L-315, Livermore, CA 94550.

POINT OF CONTACT: Jeffrey E. Pimper, (415) 422-6568, FTS 532-6568.

PURPOSE: Janus 4.0 has been used as an analysis tool to evaluate the effectiveness of new weapon systems and warfare concepts. It has also been used as a training tool, both as a command post exercise driver and as a mission plan evaluator.

DESCRIPTION:

Domain: Land and limited air units.

Span: Has been used with force sizes from squad to division level at item system resolution.

Environment: Digitized terrain from DMA or other data bases for elevation with cultural features overlay. Roads and rivers are explicitly modeled. Daytime and limited nighttime play are modeled. Weather can be changed but remains constant during game play.

Force Composition: Joint and combined forces, both RED and BLUE.

Scope of Conflict: Conventional, advanced conventional, beam and nuclear weapons, and limited chemical effects.

Mission Area: All conventional land operations.

Level of Detail of Processes and Entities: Up to 500 units per side, each composed of 1 to 15 homogeneous item systems. Acquisition is performed at the unit level but attrition is done at the item system level. Attrition is stochastic. Logistics and resupply can be played.

CONSTRUCTION:

Human Participation: Janus 4.0 can be used with or without human participation. With human participation, up to 16 players can freely interact with their units during the game. The human player performs all planning functions. Without human interaction, a preplanned scenario may be played in batch mode. The model is interruptable on a fixed time step and may then be reinstated in either mode.

Time Processing: Dynamic, event-step.

Treatment of Randomness: Stochastic, Monte Carlo.

Sidedness: Two-sided, asymmetric, both sides reactive.

LIMITATIONS: Does not explicitly model sea assets or air-to-air combat. Limited to 500 units per side and 99 different system types per side. Terrain resolution limited to 400 x 400 cells, but the cells may be of arbitrary size. Uses simple models for chemical effects and engineering obstacles.

PLANNED IMPROVEMENTS AND MODIFICATIONS: New, faster, and more accurate line-of-sight process; additional advanced conventional munitions; and more detailed engineering and chemical models.

INPUT: Terrain file, pH/pK file, user-defined symbol file, and scenario file that contains all system and unit characteristics, coefficients and parameters used by the algorithms in the model, and unit orders and plans.

OUTPUT: Players sitting at graphic workstations displays, which are continually updated during the game play, can request various status and spot reports at that time. Status, spot, and event data may be written to disk during game play for later postprocessing.

HARDWARE AND SOFTWARE:

Computer: Any VAX computer, from VAXstation 2000 through VAX 8800.

Uses the VMS 5.0 operating system.

Storage: Minimum requirement: 100,000 blocks. Large scenarios may generate large output files, up to an additional 100,000 blocks.

Peripherals: Minimum requirement: one Tektronix 4225 workstation (two required for 2-sided game play) with one graph tablet and one VT100 or compatible terminal. Can expand up to eight workstations with two graph tablets each. Printer not required but many printed reports are available.

Language: VAX FORTRAN.

Documentation: Janus 4.0 Users Manual and Janus 4.0 Algorithms Document.

SECURITY CLASSIFICATION: Unclassified, but data bases may be classified.

GENERAL DATA:

Date Implemented: 1986.

Data Base: Creating new data bases can take from one man-day to one man-month depending on size and complexity.

CPU time per Cycle: Scenario-dependent.

Data Output Analysis: The user determines which spot, status, and data are to be output to disk. Some reports can be printed, while the rest may be read into a relational data base management system for postprocessing.

Frequency of Use: Varies by installation.

Users: Lawrence Livermore National Laboratory, SOUTHCOM, Institute for Defense Analysis, Canadian National Defense Headquarters, Atomic Weapons Establishment in Britain, Command and General Staff College, Battle Simulation Center Ft. Lewis, USAICS Ft. Huachuca, USMC Quantico, and several others.

Comments: Developed and managed by Lawrence Livermore National Laboratory. Installation under site-specific MOA at government-approved sites. Source files are not distributed to users. Continually upgraded based on user requests.

TITLE: JANUS/R

MODEL TYPE: Analysis.

PROPONENT: BGWG Section, CA4 Division, R.A.R.D.E. Fort Halstead, Kent, England, UK.

POINT OF CONTACT: I.S. GARDNER, CA4 RARDE Fort Halstead, Kent, UK.

PURPOSE: JANUS/R is a research and evaluation tool that deals primarily with weapon systems development and effectiveness. It can also be used to assess force capability and requirements, dealing with courses of action, mix, effectiveness, and resource planning.

DESCRIPTION:

Domain: Land and air/land.

Span: Local.

Environment: Digitized terrain consists of data for each 50-meter square. Terrain features include spot heights, seven types of vegetation, seven types of building, rivers, roads, bridges, and obstacles. The model can handle any time of day in any weather conditions.

Force Composition: Up to brigade level.

Scope of Conflict: Conventional.

Mission Area: Any conventional missions within the domain.

Level of Detail of Processes and Entities: The lowest entities modeled are individual men, vehicles, or aircraft, although men are usually grouped into small teams. Attrition, movement, target acquisition, and logistics are modeled for each entity.

CONSTRUCTION:

Human Participation: Required for decisions, although the model will continue to run without a decision.

Time Processing: Dynamic, event-step.

Treatment of Randomness: Stochastic, Monte Carlo.

Sidedness: Two-sided, symmetric.

LIMITATIONS: Does not model C3I in any detail.

PLANNED IMPROVEMENTS AND MODIFICATIONS: A more detailed mobility model and an increase in the number of mine types are planned immediately. Approximately 30 other changes to be made have been identified.

INPUT: Terrain data, weather data, system and weapon characteristics including attrition data, mobility data and activity timings, and smoke and dust data.

OUTPUT: System status as requested during the game. Records of all direct fire and indirect fire events, mine encounters, and detections can be printed.

HARDWARE AND SOFTWARE:

Computer: VAX series from microVAX to VAX 8700 with a VMS operating system.
Storage: 100 MB.
Peripherals: RAMTEK 9400 series graphics device with a 19-inch monitor, a data tablet, a four-button puck, and a key pad; a high-speed line printer; and peripheral VT100 terminals.
Language: FORTRAN.
Documentation: N/A.

SECURITY CLASSIFICATION: Code is unclassified and data base as sent is unclassified (there is a classified key).

GENERAL DATA:

Date Implemented: 1987.

Data Base: If the data base is in the file, as most are, it takes minutes. Completely new data bases may take man-weeks.

CPU time per Cycle: Runs at ratio of 1 minute of game time to 3 minutes of real time.

Data Output Analysis: Killer-victim score boards, engagement range analysis, force exchange ratios, and loss exchange ratios.

Frequency of Use: Daily.

Users: R.A.R.D.E.

Comments: N/A.

TITLE: JANUS(T)

MODEL TYPE: Analysis (has been used as exercise driver and training model).

PROPONENT: Brigade/Battalion Interactive Simulation Division, Combat Simulation Directorate, TRAC-WSMR, White Sands Missile Range, NM 88002-5002.

POINT OF CONTACT: Mr. C. Lee Kirby, (505) 678-4949, AV 258-4949.

PURPOSE: JANUS(T) is a combat developments tool. It is an interactive, near-real-time model developed to explore the relationships of combat and tactical processes. Players make doctrinal and tactical decisions, deploy forces, develop scenarios, and make and execute plans.

DESCRIPTION:

Domain: Land, air, and sea.

Span: Can accommodate any locale, depending upon data. Normally battalion and brigade operations are conducted.

Environment: Data dependent. Three-dimensional terrain with added information representing roads, rivers, towns, and vegetation. Temperature, humidity, and wind direction are also utilized. Operations can be conducted in daytime, night, or under reduced visibility conditions.

Force Composition: Joint and combined forces, BLUE and RED.

Scope of Conflict: Virtually all weapons found on current or proposed battlefields can be portrayed. Primarily directed towards conventional warfare but has limited chemical portrayal.

Mission Area: Conventional and low-intensity conflict can be represented.

Level of Detail of Processes and Entities: Individual soldier or individual system is lowest entity modeled. Conventional direct fire from both ground and air systems is automatic and dependent on line-of-sight, probability of acquisition, response time, reload rates, range, and posture of firer and of the target. The player has the ability to mount and dismount forces on vehicles. The model also supports detailed play of precision-guided munitions such as COPPERHEAD, HELLFIRE, and FOG-M. Obstacles, natural and man-made, are represented as are smoke, artillery dust, plus radar and conventional optical and IR sensors. Chemical alarms and performance degradation due to MOPP have been incorporated. Conventional mines plus air, ground, and artillery-delivered scatterable mines are played in detail including the capabilities to breach, bull, or bypass these obstacles.

CONSTRUCTION:

Human Participation: Required to make a number of game decisions.

Time Processing: Dynamic, event-sequenced model.

Treatment of Randomness: All elements of ground, air, and sea combat are treated stochastically. Outcomes of events occur according to the laws of probability and change.

Sidedness: Two-sided, asymmetric model with both sides reactive.

LIMITATIONS: Area fire of direct fire weapons is not assessed; illumination rounds are not played; and nuclear phenomena such as dazzle, induced radiation fallout, and EMP effects are not currently assessed.

PLANNED IMPROVEMENTS AND MODIFICATIONS: An interactive MOUT capability, heterogeneous aggregation of forces, and the ability to run the model in a systemic mode are currently being worked upon. Additional enhancements to "smart" weapons capabilities and to automatic functions, such as dismounting, are planned for addition to the model.

INPUT: Phenomenology data types for weapons characteristics and effects, sensor characteristics, mine characteristics, flyer and radar data, terrain information, and forces information are all required inputs to the model.

OUTPUT: Produces a hard copy output of game statistics, artillery summaries, direct fire reports, range analyses, detection tables, and killer-victim scoreboards. Also provides a graphical replay and rerun capability.

HARDWARE AND SOFTWARE:

Computer: VAX computer with a VMS operating system.
Storage: 5 MB central memory and 456 MB mass storage.
Peripherals: Two RAMTEK 946X or two Tektronix 4125 workstations (proliferation package has four RAMTEK workstations), one graph tablet and puck per workstation, one printer, one VT-220 per workstation.
Language: VAX-11 FORTRAN.
Documentation: JANUS(T) documentation published June 1986.

SECURITY CLASSIFICATION: Unclassified.

GENERAL DATA:

Date Implemented: 1983.

Data Base: Creating a data base from scratch, when data is available from data sources, requires approximately two weeks to build and check. For normal study requirements, when only data base modifications are necessary, approximately two days are needed.

CPU time per Cycle: N/A.

Data Output Analysis: Postprocessor, hard copy and graphics, aids in analysis of output. Analysis of each game requires approximately 1/2 hour.

Frequency of Use: Varies by user, but is used at least several times per year by those users listed below.

Users: TRAC WSMR, TRAC-FLVN, Ft. Benning, Ft. Knox, Ft. Rucker, Ft. Sill, TRAC MTEY, RAND. RARDE (UK)

Comments: Continually upgraded based upon requirements and priorities established by study proponents. TRAC-WSMR is configuration control agency and the model is managed through a Model Resources Group chaired by HQ, TRAC.

TITLE: JESS - Joint Exercise Support System

MODEL TYPE: Training and education.

PROPONENT: Joint Warfare Center (JWC), Hurlburt Field, FL 32544.

POINT OF CONTACT: MAJ David E. Kendrick, (904) 884-7747, AV 579-7747.

PURPOSE: JESS is a computerized, automated CPX driver designed to aid in training Tactical Air Control Center, corps, division, and brigade staffs.

DESCRIPTION:

Domain: Land and air with limited naval functionality.

Span: Theater or regional terrain; four terrain data bases completed (Central America, Central Europe, Korea, and Southwest Asia). Terrain playbox size limited to three contiguous UTM zones due to mathematical constraints.

Environment: Hex-based (3 km hexes). Hex characteristics include trafficability, elevation, roughness, roads, chemical or nuclear contamination, fortifications, vegetation level, and urban level. Hex edge characteristics are rivers, barriers, obstacles, and bridges. Models time of day, sunrise and sunset, and during exercises is run in real time. Weather is limited to chemical effects.

Force Composition: Joint and combined forces, RED and BLUE.

Scope of Conflict: Virtually all conventional, chemical and nuclear, ground and air weapons and their effects, and logistics are fully integrated.

Mission Area: All conventional missions and limited special operations.

Level of Detail of Processes and Entities: Initial unit resolution is RED regiment, BLUE battalion, and individual sortie for air. JESS allows dynamic task organization and unit creation at the battalion- and separate company-level of BLUE forces. Operates with stochastic attrition using heterogeneous Lanchester and fractional damage. The major functional areas of ground, air, logistics, and intelligence are totally integrated. The software provides an automated interface to the Tactical Simulation (TACSIM) to provide national and strategic intelligence.

CONSTRUCTION:

Human Participation: Required for decisions and processes.

Time Processing: Dynamic, time-step. Uses a ratio of user-specified exercise time to real time.

Treatment of Randomness: N/A.

Sidedness: Two-sided, asymmetric, both sides interactive.

LIMITATIONS: Naval functionality limited to naval gunfire support and carrier air strikes.

PLANNED IMPROVEMENTS AND MODIFICATIONS: Air-to-air/air-to-ground, automated ATO generator, Round Robin airlift, JAAT, multiple simultaneous missions for batteries, two-stage engineer tasks, convoy capabilities, increased engineer capabilities, and intelligence from helicopter missions.

INPUT: Orders and information requests (more than 72 orders and 15 reports available).

OUTPUT: Printouts of movements, attrition, intelligence, and logistics.

HARDWARE AND SOFTWARE:

Computer: Suite of 14 interconnected computers and a variety of peripherals. VAX 8600 minicomputer, one MicroVAX II Gateway Processor, and 13 or more MicroVAX II microcomputers.

Storage: VAX 8600 has 128 MB of RAM. Major peripherals have one HSC 50 Hierarchical Storage Controller, three RA81 456 MB disk subsystems, one RA 60 205 MB disk subsystem (removable disk), one RL02 console terminal with 10.4 MB disk, one TA78 tape drive (1600/6250 BPI), one Printronix 600 high-speed printer, and one H4000 EtherNET transceiver.

Peripherals: MicroVAX II computer with 17 MB of RAM and three 71 MB internal disks. Each MicroVAX II supports one to three user workstations. Major peripherals per workstation include two DEC VT200 alphanumeric terminals, one GTC0 coordinate digitizing pad, one Sony laser videodisk player, two Sony color graphics monitors, one DEC LA210 dot matrix printer, and one GraphOver 9500 overlay generator.

Language: Highly stylized version of SIMSCRIPT II 5 (processed by the SDDL for readability).

Documentation: Twenty-one manuals to be published in December 1988.

SECURITY CLASSIFICATION: Unclassified, but data base is often classified.

GENERAL DATA:

Date Implemented: November 1985 (JESS 1.0), December 1988 (JESS 1.1)

Data Base: Six months (modifications-scope dependent).

CPU Time per Cycle: Depends on data base size, player configuration, and amount of conflict and distance of convoys.

Data Output Analysis: JESS is not an analysis tool but may identify areas worthy of further inspection. A postprocessor is not available.

Frequency of Use: Varies by command; usually constricted by data base construction times.

Users: JWC, Combined Arms Center, Battle Command Training Program, and I, III, V, VII, XVII Corps.

Comments: None.

TITLE: JTLS - Joint Theater Level Simulation

MODEL TYPE: Analysis (but has been used as an exercise driver and training model).

PROONENT: Joint Warfare Center, Hurlburt Field, FL 32544.

POINT OF CONTACT: Maj ^{Donnie W. Kroecker} ~~Bob Kroecker~~, (904) 884-6926, AV 579-⁰³³⁵~~0920~~.

PURPOSE: JTLS is used primarily to analyze theater-level operations plans. It is designed to serve as both an operations support and a force capability tool to assess the value of different mixes of forces or resources. The model also has been used as an exercise driver.

DESCRIPTION:

Domain: Land, air, and limited naval operations with full intelligence and logistics possible.

Span: Graphics utilization limited by the availability of JTLS video disks (including Caribbean basin, Southwest Asia, Central America, Europe, Korea, and Japan). Unit data bases have been compiled for Korea, Central America, Europe, and Southwest Asia.

Environment: Hex-based. Hexes may vary in size between data bases but not within one data base. Hex characteristics include trafficability, elevation, roads, and chemical or nuclear contamination. Models time of day and three different degrees of weather. Models railroads, rivers, and transportation barriers.

Force Composition: Joint and combined forces, BLUE and RED.

Scope of Conflict: Primarily conventional but some limited nuclear and chemical effects possible.

Mission Area: Conventional air, ground, and naval missions; effects of special operations can be modeled.

Level of Detail of Processes and Entities: Data base defines unit size and combat systems represented. Thirteen different operational unit sizes can be represented. Ground attrition is based on Lanchester coefficients as modified by environment and terrain. Losses are assessed against units on a data base-defined period. Air attrition is assessed by probability of kill with output as individual aircraft kills. Missions are composed of single sorties, multiple aircraft, or multiple packages as dynamically called for during scenario execution. Naval ships are modeled as individual units. Attrition occurs based on vulnerability remaining versus number of hits taken. Amphibious operations are explicitly modeled.

CONSTRUCTION:

Human Participation: Required for decisions and processes.

Time Processing: Dynamic, event-step; user-specified ratio of exercise time to real time.

Treatment of Randomness: Deterministic land attrition uses Lanchester-based methodology. Air and naval attrition stochastically based on direct computation of probability of both detection and kill, with Monte Carlo determination of result.

Sidedness: Two-sided, asymmetric (both sides are interactive).

LIMITATIONS: Does not model naval mine warfare, undersea operations, special operations, or land-based cruise missiles.

PLANNED IMPROVEMENTS AND MODIFICATIONS: User requirements for a revised Postprocessor function are being developed. Completion of the INGRES-based Scenario Development System and the Information Management Terminal, dynamic creation of units, automated ATO generator, and SUN graphics capabilities are scheduled for FY89.

INPUT: Takes relevant terrain, weapons, movement, attrition tables, unit characteristics, and TPFDD information as input.

OUTPUT: Produces printouts of movement, attrition, intelligence, logistic data, and unit status.

HARDWARE AND SOFTWARE:

| | |
|------------------------|---|
| <u>Computer</u> : | Designed to run on VAX 8600 series using the VMS operating system; Microvax II operation is possible. |
| <u>Storage</u> : | 240,000 blocks (122 megabytes) needed before data base installed. |
| <u>Peripherals</u> : | Minimum requirements: 1 printer, 1 graphic suite, and 4 VT100 terminals. |
| <u>Language</u> : | SIMSCRIPT II.5, "C," DCL, and INGRES. |
| <u>Documentation</u> : | Extensively documented with 13 published manuals. |

SECURITY CLASSIFICATION: Unclassified, but data bases are often classified.

GENERAL DATA:

Date Implemented: 1983.

Data Base: Complex, time-consuming development process due to the extensive information required.

CPU time per Cycle: Dependent on data base size, scenario complexity, and hardware configuration.

Data Output Analysis: Produces hard copies of raw data.

Frequency of Use: Varies by command.

Users: USCENTCOM, USEUCOM, USSOUTHCOM, Joint Warfare Center, AUCADRE, Army War College, and Naval Postgraduate School, and Combined Forces Command/KOREA.

Comments: A configuration board made up of representatives of all users manages model and establishes priorities for model enhancement.

TITLE: Low Intensity Conflict Gaming System

MODEL TYPE: Education and training (can be used for analysis as well).

PROPONENT: War Gaming and Simulation Center, National Defense University, Fort Leslie J. McNair, Washington, DC 20319-6000.

POINT OF CONTACT: Mr. Bill Bedenbaugh, (202) 475-1251, AV 335-1251.

PURPOSE: The Low Intensity Conflict Gaming System provides a research tool for policy analysis and an educational tool to expose students, through war game seminars, to the nuances of dealing with the political, military, economic, social, and psychological aspects of political stability problems in Third World countries. The model examines these aspects in the context of an insurgency/counterinsurgency situation in a Latin American country, but the system's generic design can be modified for application to any country.

DESCRIPTION:

Domain: Abstract; the model simulates a country's internal economics, political and military effects of actions, changes in the social and political state of the general populace, and changes in internal politics in any intervening powers.

Span: Regional.

Environment: Elements such as terrain relief and weather are not specifically modeled.

Force Composition: The model portrays social, political, and economic population groups indigenous to the modeled region, as well as highly aggregated indigenous/allied military forces.

Scope of Conflict: The military forces modeled have conventional and unconventional warfare assets. Other entities, such as civilian and governmental, have social, political, and economic strength assets. All of these assets are represented as numerical levels of strength.

Mission Area: The primary mission of modeled entities (and the players) is the achievement of goals through the allocation of assets.

Level of Detail of Processes and Entities: The entities and processes modeled range in level from international to subnational groups and individuals.

CONSTRUCTION:

Human Participation: Required for decisions and processes. Players evaluate objectives and available assets, commit their resources, and report their decisions to the adjudicator who codes their actions for system input then decodes the results for the next turn of play.

Time Processing: Dynamic. Processes are time-stepped, as well as event-stepped when the model is used in an interactive gaming mode.

Treatment of Randomness: The model is normally operated in a direct computation mode.

Sidedness: Three or more sides can be represented, and each side can be reactive or nonreactive.

LIMITATIONS: Adjudicators for the game should be country experts and at least one must have experience in the use of the automated adjudication tool.

PLANNED IMPROVEMENT: Additional modules to simulate issues of terrorism, antidrug operations, peace keeping operations, and peacetime contingency operations are being considered.

INPUT: Input during play consists of numerically represented allocation of player assets.

OUTPUT: Consists of numerical changes in data values that represent player assets and the sociopolitical-economic situation of the modeled region.

HARDWARE AND SOFTWARE:

Computer: Apple Macintosh II or SE, or IBM AT compatible computer.

Storage: At least 1 MB RAM.

Peripherals: Printers compatible with the computers listed above can be used, but are not required.

Language: The software consists of a Microsoft Excel commercial spreadsheet application.

Documentation: Design handbook, player handbook, data handbook, and sources book.

SECURITY CLASSIFICATION: Unclassified.

GENERAL DATA:

Date Implemented: July 1988.

Data Base: Requires approximately two months to develop.

CPU Time per Cycle: Minimal.

Data Output Analysis: Knowledgeable adjudicators can turn player actions into numerical inputs to model, run the model, and translate the output into text in three to six hours.

Frequency of Use: Intended for use in seminars at the National Defense University.

Users: National Defense University War Gaming and Simulations Center.

Comments: None.

TITLE: PANTHER: Low Intensity Conflict (LIC) Simulation

MODEL TYPE: Training and education.

PROponent: Combined Arms Training Activity (CATA)/TRADOC Analysis Command, Fort Leavenworth (TRAC-FLVN).

POINT OF CONTACT: CW2 David D. Holmes, (913) 684-5426, AV 552-⁵⁵¹¹~~5426~~.

PURPOSE: PANTHER is a command post exercise driver used to train brigade and battalion command and staff elements conducting operations in a LIC environment.

DESCRIPTION:

Domain: Air, land, and sea with emphasis on land.

Span: Regional or local area.

Environment: Uses standard topographic maps (1:6250 suggested scale); some game functions sensitive to night and day, weather, and terrain features.

Force Composition: Primarily designed to simulate a brigade force, but data structures are flexible enough to simulate joint forces, paramilitary and police forces, and guerilla forces.

Scope of Conflict: Uses conventional and subconventional weapons, and depicts operations from terrorist attacks through company-on-company operations.

Mission Area: Uses any and all conventional weapon types to combat insurgents in operational area. Primary goal of simulation is to control and protect population in operational area.

Level of Detail of Processes and Entities: The lowest level of detail that may be directly represented is a squad, individual equipment/weapon system, individual watercraft, or individual air frame. All squad records are capable of defining from 1 to 20 personnel and from 1 to 10 equipment systems (exclusive of individual weapons that are associated with individuals). Casualties and equipment damages are applied to individual persons or systems defined within the squad. It is recommended that a squad record be used to define an infantry squad, headquarters element, a single major equipment system, and crew (i.e., one truck and crew, one helicopter and crew, or one howitzer and crew).

CONSTRUCTION:

Human Participation: Required for decisions and processes. Some routine decisions and processes are automatic and not interruptable (e.g., hourly consumption calculation, nonbattle calculations, and maintenance failures).

Time Processing: Dynamic, time-step.

Treatment of Randomness: Stochastic, Monte Carlo.

Sidedness: Basically a three-sided game with the RED and BLUE forces fighting each other, with both competing for the loyalty of the GREY force (civilian population). The RED and BLUE forces may be symmetric or asymmetric (scenario dependent). The GREY force is asymmetric and nonreactive.

LIMITATIONS: No special representation in computer model. All terrain, location, line-of-sight, and detection functions/features must be played on the map board with the markers/counters and human interpretation of terrain effects.

PLANNED IMPROVEMENTS AND MODIFICATIONS: Basic model is under development.

INPUT: Weapons, equipment systems, and ammunition characteristics are defined in library files that must only be input once (although they are capable of being changed). Troop unit definitions and population center (GREY force) definitions must be entered for each scenario to be played.

OUTPUT: Includes processed data describing current status of units, actions affecting units, results of actions by units, as well as standard reports showing library definitions.

HARDWARE AND SOFTWARE:

Computer: One or more IBM compatible personal computers; MS DOS 2.0 or greater operating system.

Storage: 512K internal memory.

Peripherals: At least 10 MB hard disk (20 or 40 preferred), color graphics adapter, one or more floppy disk drives, and Epson compatible printer.

Language: Turbo Pascal Version 5.5.

Documentation: Future contractor deliverable.

SECURITY CLASSIFICATION: Unclassified.

GENERAL DATA:

Date Implemented: N/A.

Data Base: Depends on scenario complexity. Probable range of one to five days.

CPU time per Cycle: Indeterminate.

Data Output Analysis: No specific analysis required. Data output is supplied to users in report format. No further analysis requirements have been defined.

Frequency of Use: As required to drive appropriate CPX training simulation.

Users: USSOUTHCOM, USARSA, U.S. light infantry divisions, friendly Latin American militaries, and U.S. and friendly foreign military schools.

Comments: Model described herein is intended as a baseline prototype for an LIC simulator. Significant enhancements to basic structure are anticipated.

TITLE: SEES 1.1 - Security Exercise Evaluation Simulation Version 1.1

MODEL TYPE: Analysis and training.

PROPONENT: Conflict Simulation Laboratory, Lawrence Livermore National Laboratory, P.O. Box 808 L-315, Livermore, CA 94550.

POINT OF CONTACT: Lauri A. Dobbs, (415) 423-8590, FTS 543-8590.

PURPOSE: SEES simulates close combat in an urban terrain. For analysis, SEES provides a tool to assess the vulnerability of sensitive urban areas, aids in the evaluation of proposed modifications to security safeguards, and assists in safeguard resource cost and risk analysis. SEES can also be used for training in command, control, communications, and tactics.

DESCRIPTION:

Domain: Land.

Span: Can be used with force sizes from squad to platoon level at item system resolution.

Environment: Digitized terrain from DMA or other data bases for elevation with cultural features overlay. One story buildings (interiors and exteriors), fences, and roads are explicitly modeled. Daytime and limited nighttime play are modeled. Weather can be changed but remains constant during the simulation.

Force Composition: Dismounted troops and their associated vehicles; RED and BLUE sides.

Scope of Conflict: Unconventional with limited chemical.

Mission Area: Close combat in urban terrain.

Level of Detail of Processes and Entities: Up to 500 item systems per side. Attrition and attrition are done at the item system level. Attrition is stochastic. Logistics and resupply can be played.

CONSTRUCTION:

Human Participation: SEES can be used with or without human participation. With human participation, up to 16 players can freely interact with their units during the simulation. All planning functions are performed by the human player. Without human interaction, a preplanned scenario can be played in batch mode. The model is interruptable on a fixed time step and then reinstated in either mode.

Time Processing: Dynamic, event-step.

Treatment of Randomness: Stochastic, Monte Carlo.

Sidedness: Two-sided, asymmetric, both sides reactive.

LIMITATIONS: Because SEES 1.1 was developed from the Janus model, human item systems are modeled simplistically. Only one-story buildings are modeled. Currently, artillery has no effect on the buildings, fences, and roads.

PLANNED IMPROVEMENTS AND MODIFICATIONS: SEES 2.0, which is currently under development, will have a detailed model of human item systems including strength, endurance, running speeds, and breaching capabilities. The terrain modeled will include multi-story buildings and features such as roads, vegetation areas, and rivers affecting line-of-sight and movement of humans.

INPUT: Terrain file, pH/pK file, user-defined symbol file, and scenario file that contains all item systems characteristics, coefficients and parameters used by the algorithms in the model, and orders and plans.

OUTPUT: Players sitting at graphic workstation displays, which are continually updated during the simulation, can request various status reports at any time. Status and event data may be written to disks during the simulation for postprocessing.

HARDWARE AND SOFTWARE:

Computer: Any VAX computer, from VAXstation 2000 through VAX 8800.
Uses VMS 5.0 operating system.

Storage: Minimum requirement: 50,000 blocks.

Peripherals: Minimum requirement: one Tektronix 4225 workstation (two required for 2-sided simulations) with one graph tablet, one VT100 or compatible terminal. Can expand up to eight workstations with two graph tablets each. Printer is not required but there are many printed reports available.

Language: VAX FORTRAN (SEES 2.0 will use VAX Ada).

Documentation: SEES Users Manual and SEES Algorithms Document.

SECURITY CLASSIFICATION: Unclassified, but data bases may be classified.

GENERAL DATA:

Date Implemented: 1987.

Data Base: Creating new data bases may take from one-half man-day up to one man-week depending on the size and complexity.

CPU time per Cycle: Scenario-dependent. Smaller scenarios will run 10 times as fast real time, but can be slowed to real time in order to give the players time to react.

Data Output Analysis: The user determines which status and event data is to be output to disk. Some reports can be printed, while the rest may be read into a relational data base management system for postprocessing.

Frequency of Use: Currently used three to four times per year to assist in the preparation of force-on-force exercises.

Users: Lawrence Livermore National Laboratory.

Comments: SEES 1.1 has been developed and managed by Lawrence Livermore National Laboratory. Installations are done under site-specific MOAs at government-approved sites. Source files are not distributed to users.

TITLE: SLIC - A Simple Low-Intensity Conflict Assessment Model

MODEL TYPE: Analysis.

PROPOSER: Dr. Daniel Wu, DCA/JDSSC/C314, The Pentagon, Washington, DC
20301-7010.

POINT OF CONTACT: Dr. Daniel Wu, (202) 695-0025, AV 225-0025.

PURPOSE: The model yields an overview of comparative or relative military strength, economic condition, popular support, and political stability in terms of aggregated indicators of low-intensity conflict.

DESCRIPTION:

Domain: Strategic assessment.

Span: Single country.

Environment: N/A.

Force Composition: Government vs. insurgent.

Scope of Conflict: Low intensity.

Mission Area: Special mission.

Level of Detail of Processes and Entities: Highly aggregated.

CONSTRUCTION:

Human Participation: Not required.

Time Processing: Dynamic.

Treatment of Randomness: Little.

Sidedness: Government vs. insurgent.

LIMITATIONS: Highly aggregated.

PLANNED IMPROVEMENTS AND MODIFICATIONS: More research is needed.

INPUT: Moderate country data.

OUTPUT: Dynamic trends (graphics or tabulation).

HARDWARE AND SOFTWARE:

Computer: PC.

Storage: Minimum.

Peripherals: One printer.

Language: Professional DYNAMO.

Documentation: A paper.

SECURITY CLASSIFICATION: Unclassified.

GENERAL DATA:

Date Implemented: 1988.

Data Base: Moderate data base for the country of interest.

CPU time per Cycle: Minimum.

Data Output Analysis: Trend projection.

Frequency of Use: Research model.

Users: To be established.

Comments: This is a simple model for high-level policy makers.

TITLE: SOTACA - State of the Art Contingency Analysis

MODEL TYPE: Analysis.

PROPONENT: Joint Warfare Center, Hurlburt Field, FL 32544.

POINT OF CONTACT: Joint Warfare Center, (904) 844-6926, AV 579-6926.

PURPOSE: SOTACA is an operations support tool (decision aid) used in the time-sensitive planning process by planners of the unified and specified commands to quickly analyze and compare alternative courses of action. The planner can assess feasibility, suitability, acceptability and completeness of the varied courses of action using factors such as force attrition, movement rate to an objective area or in accomplishing the mission, and fuel and ammunition expenditures as measures of effectiveness.

DESCRIPTION:

Domain: The operating area is defined by the user.

Span: Can be scaled for global, theater, regional, local, or individual applications.

Environment: Using a network of nodes and links, the user sets mobility and terrain parameters to define the operating environment.

Force Composition: Any mix of forces can be portrayed by the model, including combined forces, joint forces, or separate component forces.

Scope of Conflict: Any category of weapon or weapon types for friendly and enemy forces can be considered, including conventional, chemical-biological-nuclear, special, rear-area, and political.

Mission Area: Any combination of weapons or procedures mission can be modeled.

Level of Detail of Processes and Entities: Entity: The lowest entity modeled may be a single warrior, weapon, or task force. Processes: Confrontation between opposing forces affects the defined entities that are assigned specific attributes and missions.

CONSTRUCTION:

Human Participation: Interactive with human participation required for decisions and processes.

Time Processing: Dynamic, time-step.

Treatment of Randomness: The model is basically deterministic.

Sidedness: Two-sided, symmetric.

LIMITATIONS: Because SOTACA is a first cut, low-resolution model, the level of detail provides extremely rough calculations for the measures of effectiveness, which limits course of action assessment to comparative

analysis techniques. In addition, entity (weapon) attributes, such as power or vulnerability, are defined by relative comparisons based on user experience or user-known limitations of the entity, not necessarily by quantifiable characteristics, such as rate of fire, kill probabilities, or other engineering specifications. Confrontations or conflict between opposing forces occurs only at the user defined nodes of the generated network, a limitation that can be overcome by various gaming techniques.

PLANNED IMPROVEMENTS AND MODIFICATIONS: The above noted limitations are subjects of continued research to improve the current model.

INPUT: The user enters a listing of the available forces, organizes those forces into employable task forces, defines their power and vulnerability attributes, establishes logistic factors, defines the operating area, and defines the employment plan of all forces in the operating area.

OUTPUT: Computer printouts or screen displays that contain raw data of force attrition, ammunition and fuel usage, time elapsed, unit locations, and other data used for analysis.

HARDWARE AND SOFTWARE:

Computer: VAX 11-780, 8600/8700, or MicroVAX with Techtronics VT100 or 4107/4109/4207/4209 terminal.

Storage: Minimum storage required (WITHOUT DATA) is 120,000 disk blocks (512 bytes/block).

Peripherals: A printer for hard copy outputs is required.

Language: The model is designed in FORTRAN.

Documentation: A user's manual for the current version is available as well as documentation describing the mathematical methodology used by the model.

SECURITY CLASSIFICATION: Unclassified, but the user data base is classified.

GENERAL DATA:

Date Implemented: 1985

Data Base: 48 hours or less.

CPU time per Cycle: 8 hours of real time can be replicated by the model in 3 seconds of CPU time.

Data Output Analysis: Several hours.

Frequency of Use: As required.

Users: CINCs of unified and specified commands.

Comments: Times stated to for data base input and data output analysis are entirely dependent on level of detail and quantity of data. SOTACA has been designed to compare multiple courses of action to determine differences between different employment schemes. This allows a planning staff to consider various options in determining the most effective employment strategy of assigned forces.

LIST OF PARTICIPANTS
LOW INTENSITY CONFLICT ANALYSIS WORKSHOP -- LICAWS
6 - 7 JUNE 1991

| <u>NAME</u> | <u>ORGANIZATION and ADDRESS</u> | <u>TELEPHONE</u> |
|--------------------------|---|--|
| MR WILLIAM H. BEDENBAUGH | National Defense University Ft McNair (WGSC) Washington, D.C. 20319-6000 | (202) 475-1251 DSN 335-1251 |
| CPT J. W. BEHYMER | AFCSA/SAG Pentagon, Room 1D380 Washington, D.C. | DSN 224-4247 |
| LTC K. BENWAY | HQ USAJFKSWCS Ft Bragg, NC 28317-5000 | DSN 239-5393/ 7328 |
| DR ANDY BIRTLE | USA Center Military History Bldg 159, SE Federal Center Washington, D.C. | DSN 275-4589 |
| LTC DAVID G. BOYD | The Joint Staff J-8 / Pol-Mil Assessment Div (PMAD) Washington, D.C. 20318-8000 | DSN 225-2020 |
| MAJ STEVEN H. CARY | USACAA 8120 Woodmont Ave ATTN: CSCA-MVI Bethesda, MD 20814-2797 | (301) 295-6992 DSN 295-6992 |
| MAJ W. COUNCIL | HQ USAJFKSWCS ATTN: DOTD-DT-DD Ft Bragg, NC 28307-5000 | (919) 432-8689 DSN 239-8689 |
| MAJ SERGIO DE LA PEÑA | CAC-T ATTN: ATZL-CTS-BB Ft Leavenworth, KS 66027 | (913) 684- 3189/3395 DSN 552- 3189/3395 |
| LTCOL JIM DIEHL | OASD (SO/LIC) Policy Pentagon, Room 2B525 Washington, D.C. | (703) 693-5208 DSN 223-5208 |
| COL H. LEE DIXON | A-AF Center for LIC Langley AFB, VA 23665 5556 | DSN 574-5805 |
| LTC M. BRUCE ELLIOTT | HQ USACE 20 Massachusetts Ave NW Washington, D.C. 20314-1000 | |

| | | |
|------------------------|---|--|
| MR JOHN ELLIOTT | USACAA 8120 Woodmont Ave ATTN: CSCA-SPC Bethesda, MD 20814-2797 | (301) 295-1680 DSN 295-1680 |
| LTC GORDON ETTENSON | USSOCOM, SOJ5-J MacDill AFB, FL 33608 | DSN 968-2151 |
| MR JOHN FRIEL | RAND Corporation Santa Barbara, CA 90406-2138 | (213) 393-0411 Ext 6712 |
| MS JULIA A. FULLER | USACAA 8120 Woodmont Ave ATTN: CSCA-SPC Bethesda, MD 20814-2797 | (301) 295-4715 DSN 295-4715 |
| MR DAVID FULLER | USACAA 8120 Woodmont Ave ATTN: CSCA-SPC Bethesda, MD 20814-2797 | (301) 295-4711 DSN 295-4711 |
| LTC C. HARRY GOLDING | USACAA 8120 Woodmont Ave ATTN: CSCA-SPC Bethesda, MD 20814-2797 | (301) 295-1708 DSN 295-1708 |
| CFT KEVIN J. HAMMOND | USACAA 8120 Woodmont Ave ATTN: CSCA-RQF/P Bethesda, MD 20814-2797 | (301) 295-5274 DSN 295-5274 |
| LTC SAMMY D. HENDERSON | COMMANDER, CAC ATTN: ATZL-LIC-L (APOLIC) Ft Leavenworth, KS 66027-6900 | (913) 684-4597/ 2172 DSN 552-4597/ 2172 |
| CPT ERIC HOLMES | USACAA 8120 Woodmont Ave ATTN: CSCA-SPC Bethesda, MD 20814-2797 | (301) 295-1647 DSN 295-1647 |
| MR BILL KRONDAK | TRADOC Analysis Command Scenarios and Wargaming Center Ft Leavenworth, KS 66027 | DSN 552-4011 |
| MAJ C. MARASHIAN | Dept Cmdt, C&GSC ATTN: ATZL-SWW-C Ft Leavenworth, KS 66027-6900 | DSN 552-3780 |
| MR ALLEN S. MILLER | US Army War College Center for Strategic Wargaming Box 433 Carlisle Barracks, PA 17013 | (717) 245-4169 DSN 242-4169 |

| | | |
|--------------------------|--|--------------------------------|
| COL CARLTON F. ROBERSON | USSOCOM, SOJ7-S MacDill AFB, FL 33608-6000 | DSN 968-4458 |
| CPT MARK ROBINSON | CDR, USAJFKSWCS ATTN: AOJK-CD-ML Ft Bragg, NC 28307-5000 | (919) 432-7007 DSN 239-7007 |
| MAJ MARK D. ROCKE | HQDA, ODCSOPS DAMO-SSP Washington, D.C. 20310 | (703) 695-5367 DSN 225-5367 |
| LTC LARRY D. SCHROEDER | Wargaming & Simulation Center National Defense University Ft McNair Washington, D.C. 20319-6000 | (202) 475-1251 DSN 335-1251 |
| MR DANIEL J. SHEDLOWSKI | USACAA 8120 Woodmont Ave ATTN: CSCA-SP Bethesda, MD 20814-2797 | (301) 295-1532 DSN 295-1532 |
| MR JOHN E. SHEPHERD | USACAA 8120 Woodmont Ave ATTN: CSCA-RSD Bethesda, MD 20814-2797 | (301) 295-1643 DSN 295-1643 |
| MR E. B. VANDIVER III | Director, USACAA 8120 Woodmont Ave ATTN: CSCA-ZA Bethesda, MD 20814-2797 | (301) 295-1605 DSN 295-1605 |
| LTG (R) S. TOM WEINSTEIN | RAND Corporation EWA 2071 Chain Bridge Rd Vienna, VA 22182 | (703) 893-4820 |
| CDR JOSEPH M. WHITE | USSOCOM, SOJ7-S MacDill AFB, FL 33608-6000 | DSN 968-4458/ 4189 |
| DR LARRY A. YATES | Combat Studies Institute USAC&GSC Ft Leavenworth, KS 66027 | DSN 552-3414 |
| LTC JOHN R. YOUNG | HQDA, ODCSOPS DAMO-ODO Washington, D.C. 20310 | (703) 695-2315 DSN 225-2315 |

DISTRIBUTION

Deputy Chief of Staff for Operations and Plans
Headquarters, Department of the Army
ATTN: DAMO-ZXA
Washington, D.C. 20310

Deputy Chief of Staff for Logistics
Headquarters, Department of the Army
ATTN: DALO-ZXA-A
Room 3D572, The Pentagon
Washington, D.C. 20310-0580

Commander
U.S. Army Logistics Center
ATTN: ATCL-CFS
Fort Lee, VA 23801

Commander
U.S. Army Troop Support Agency
ATTN: DALO-TAX
Fort Lee, VA 23801

Office of the Secretary of the Army
Correspondence & Records Center
Management Systems & Support
ATTN: JDMSS-CRC
Room 3D718, The Pentagon
Washington, D.C. 20310-0105

Office of the Surgeon General
ATTN: DASG-HCD
5109 Leesburg Pike
Falls Church, VA 22041-3258

Director
U.S. Army TRADOC Analysis Command
ATTN: ATRC-WSL
White Sands Missile Range, NM 88002-5502

Commander, TRAC
ATTN: ATRC-TD
Fort Leavenworth, KS 66027-5200

HQ TRAC, RPD
ATTN: ATRC-RPP
Fort Monroe, VA 23651-5443

Director
U.S. Army Materiel Systems Analysis Activity
ATTN: AMXSJ-LM
Aberdeen Proving Ground, MD 21005-5071

Director
U.S. Army Ballistic Research Laboratories
ATTN: SLCBR-D
Building 305
Aberdeen Proving Ground, MD 21005-5066

Commander
U.S. Army Combined Arms Command
ATTN: ATZL-CMO-M
Fort Leavenworth, KS 66027-7210

Commander
U.S. Army Test and Evaluation Command
ATTN: AMSTE-SI-S
Aberdeen Proving Ground, MD 21005-5000

Commander
Foreign Science and Technology Center
220 7th Street NE
Charlottesville, VA 22901-5396

Commander
Army Research Institute
ATTN: Security Manager
5001 Eisenhower Avenue
Alexandria, VA 22333

Headquarters
U.S. Army Materiel Command
ATTN: AMCPE-AR
5001 Eisenhower Avenue
Alexandria, VA 22333-0001

Commander
U.S. Army Garrison, Fort Huachuca
ATTN: ASH-IM-O-MAM
Room 2521A, Greely Hall
Fort Huachuca, AZ 85613-6000

U.S. Army CE Command
Program Analysis and Evaluation
Systems Analysis Division
Fort Monmouth, NJ 07703

Defense Technical Information Center
ATTN: DTIC-FPS
Cameron Station
Alexandria, VA 22314-6145

U.S. Army Service Center for the Armed Forces
The Pentagon Library (Army Studies Section)
ATTN: ANRAL-RS
Room 1A518, The Pentagon
Washington, D.C. 20310-6000

Commander in Chief
Forces Command
ATTN: FCJ6-OAR
Fort McPherson, GA 30330-6000

OSD (PA&E) (DC&L)
Room 2E313, The Pentagon
Washington, D.C. 20310-1800

Joint Chiefs of Staff
SJCS, Documents Division
ATTN: RAIR Branch
Room 2B939, The Pentagon
Washington, D.C. 20310-5000

Integration and Assessment Division
Joint Staff/J8
Room 1D964, The Pentagon
Washington, D.C. 20318-8000

Office of the Secretary of Defense
Office of the Director Net Assessment
Room 3A930, The Pentagon
Washington, D.C. 20310

Office of the Under Secretary of the Army
Deputy Under Secretary (Operations Research)
Room 2E660, The Pentagon
Washington, D.C. 20310

AFCSA/SAG
Pentagon, Room 1D380
Washington, D.C.

Joint Chiefs of Staff
J-8 / Pol-Mil Assessment Div (PMAD)
Washington, D.C. 20318-8000

Headquarters
U.S. Army JFK Special Warfare Center and School
ATTN: DOTD-DT-DD
Fort Bragg, NC 28307-5000

Commander
U.S. Army JFK Special Warfare Center and School
ATTN: AOJK-CD-ML
Fort Bragg, NC 28307-5000

U.S. Army Center Military History
Bldg 159, SE Federal Center
Washington, D.C.

Commander
Combined Arms Command-Training
ATTN: ATZL-CTS-BB
Fort Leavenworth, KS 66027

Commander
Combined Arms Command
ATTN: ATZL-LIC-L (APOLIC)
Fort Leavenworth, KS 66027-6900

Commander, TRAC
ATTN: ATRC-SWH
Fort Leavenworth, KS 66027-5210

Commandant
U.S. Army Command and General Staff College
ATTN: ATZL-SWW-C
Fort Leavenworth, KS 66027-6900

Commandant
U.S. Army Command and General Staff College
ATTN: Combat Studies Institute
Fort Leavenworth, KS 66027

Office of the Assistant Secretary of Defense
(Special Operations/Low Intensity Conflict) Policy
Room 2B525 The Pentagon
Washington, D.C.

Commander
Army-Air Force Center for Low Intensity Conflict
Langley Air Force Base, VA 23665-5556

U.S. Special Operations Command
ATTN: SOJ4
MacDill Air Force Base, FL 33608-6001

U.S. Special Operations Command
ATTN: SOJ5-J
MacDill Air Force Base, FL 33608-6000

U.S. Special Operations Command
ATTN: SOJ7-S
Building 501
MacDill Air Force Base, FL 33608-6000

The RAND Corporation
2100 M Street NW
Washington, D.C. 20037-1270

The RAND Corporation
1700 Main Street
PO Box 2138 (Mr Friel)
Santa Monica CA 90406-2138

Director
U.S. Army Materiel Systems Analysis Activity
ATTN: AXMSY-DD
Aberdeen Proving Grounds, MD 21005-5071

Headquarters
U.S. Army Forces Command
ATTN: FCJ3-OD
Fort McPherson, GA 30330

Commandant
U.S. Army War College
Operations Group
ATTN: AWCM-A
Carlisle Barracks, PA 17013-5050

U.S. Army War College
Center for Strategic Wargaming
Box 433
Carlisle Barracks, PA 17013

Commandant
Air Force Institute of Technology
ATTN: AFIT-EN
Wright-Patterson AFB, OH 45433

Air War College
ATTN: AU/CADRE/WGOI
Maxwell Air Force Base, AL 36112-5522

President
U.S. Navy War College
ATTN: HL-9, CMCO
Newport, RI 02841-5010

President
U.S. Navy War College
ATTN: E-111
Newport, RI 02841-5010

Chief of Naval Operations
ATTN: OP-09B34F1
Room 4C479, The Pentagon
Washington, D.C. 20350

Office of the Chief of Naval Research
ATTN: Code 01221
Arlinton, VA 22217-5000

Department of the Navy
ATTN: Code 71543
Washington, D.C. 20361

Commander
Military Sealift Command
ATTN: N3
Building 210, WNY
Washington, D.C. 20398-5100

U.S. Liaison Officer to
Supreme Allied Commander Atlantic
Norfolk, VA 23511-5100

Commandant
U.S. Marine Corps
ATTN: HQSR-3
Washington, D.C. 20380

President
National Defense College
ATTN: NDU-LD-CDC
Washington, D.C. 20319-6000

Commandant
Armed Forces Staff College
ATTN: PAD, Rm C-117-V
Norfolk, VA 23511-6097

Commandant
U.S. Army Command and General Staff College
ATTN: ATZL-SWS-L (Mail)
Fort Leavenworth, KS 66027-6900

Deputy Chief of Staff for Operations and Plans
Headquarters, Department of the Army
ATTN: DAMO-SSP
Washington, D.C. 20310

National Defense University
Wargaming & Simulation Center
Fort McNair
Washington, D.C. 20319-6000

MACOS/XOND
Scott Air Force Base, IL 62225-5001

Headquarters
Tactical Air Command
ATTN: DAAS
Langley Air Force Base, VA 23665-5001

HQ USAF
Asst Chief of Staff-Intelligence
Directorate of Force Management
ATTN: AF/INF P
Room BD936, The Pentagon
Washington, DC 20330-5110

United States Military Academy
ATTN: MAIM-SC-A
West Point, NY 10996-5000

Superintendent
Naval Postgraduate School
ATTN: Security Manager
Monterey, CA 93940

Commandant
U.S. Army Infantry School
ATTN: ATZB-IM-OAM
Fort Benning, GA 31905

Commandant
U.S. Army Armor School
ATTN: ATSB-CD-AA
Fort Knox, KY 40121-5215

Commandant
U.S. Army Field Artillery School
ATTN: ATZR-C
Fort Sill, OK 73503-5001

Commandant
U.S. Army Air Defense School
ATTN: ATSA-CDF
Fort Bliss, TX 79916

Commandant
U.S. Army Aviation School
ATTN: ATZQ-CDO
Fort Rucker, AL 36360

Commandant
U.S. Army Engineer School
ATTN: ATSE-CDO-F
Fort Leonard Wood, MO 65473-6620

Commandant
U.S. Army Transportation School
ATTN: ATSQ-CDO
Fort Eustis, VA 23604-5419

Commandant
U.S. Army Intelligence Center and School
ATTN: ATSI-SE-AM
Fort Huachuca, AZ 85613

Commandant
U.S. Army Ordnance Center and School
ATTN: ATSL-CMT
Aberdeen Proving Ground, MD 21005-5201

Commandant
U.S. Army Ordnance, Missile and Munitions Center and School
ATTN: ATSK-CMT
Redstone Arsenal, AL 35897-6000

Commander
U.S. Army Missile Command
ATTN: AMSMI-OR-SA
Redstone Arsenal, AL 35898-5060

Commandant
U.S. Army Quartermaster School
ATTN: ATSM-OS
Fort Lee, VA 23801-6043

Commander
U.S. Army Combat Developments Experimentation Command
Fort Ord, CA 93941

Commander
U.S. Military Traffic Management Command
ATTN: MT-PLL
5611 Columbia Pike
Falls Church, VA 22041-5050

Director
U.S. Army Human Engineering Laboratory
Aberdeen Proving Ground, ME 21005-5001

Commander
U.S. Army Pacific Command
ATTN: APOP-SPM
Fort Shafter, HI 96858-5100

Commander
U.S. Army Information Systems Software Center
ATTN: ASBI-SP (Stop C30)
Fort Belvoir, VA 22060-5456

Commander
U.S. Army Intelligence and Security Command
ATTN: IAIM-SA-AD
Fort Belvoir, VA 22060

Commander/Director
U.S. Army Engineer Studies Center
Casey Building, No. 2594
ATTN: ESC-AO
Fort Belvoir, VA 22060-5583

Commander
U.S. Army Corps of Engineers
ATTN: CEIM-SO-M
20 Massachusetts Avenue NW
Washington, D.C. 20314-1000

Commander
U.S. Army Health Services Command
ATTN: HSOP-FSI
Fort Sam Houston, TX 78234-6000

Commander
U.S. Army Medical Research and Development Command
ATTN: SGRD-OP
Fort Detrick, MD 21701

Director
Strategic Studies Institute
U.S. Army War College
Carlisle Barracks, PA 17013-5050

Commander
Eighth U.S. Army
ATTN: EADJ-T-P
APO San Francisco 96301

Commander
U.S. Army, Japan
ATTN: AJCS
APO San Francisco 96343

Commander in Chief
U.S. Army, Europe & Seventh Army
ATTN: AEAGF-X-A
APO New York 09403-0105

Commander in Chief
U.S. Army, Europe & Seventh Army
ATTN: AEAGX-OR
APO New York 09403

Deputy Chief of Staff for Operations and Plans
Headquarters, Department of the Army
ATTN: DAMO-ODO
Washington, D.C. 20310

Headquarters
U.S. Southern Command
ATTN: SCJ5
APO Miami 34003

Headquarters
U.S. Southern Command
ATTN: SCJ5-RW
APO Miami 34003

U.S. Army South
ATTN: SOOP
APO Miami 34004-5000

Headquarters
U.S. Army Training and Doctrine Command
Office of ADCSCD
ATTN: ATCD-K
Fort Monroe, VA 23651-5000

Commander
U.S. Army Training and Doctrine Command
ATTN: ATIM-OPM
Fort Monroe, VA 23651-5000

Commander
PERSCOM
ATTN: TAPC-MOP
200 Stovall Street
Alexandria, VA 22332-0432

Commander
U.S. Total Army Personnel Agency
ATTN: DAPC-ZA
200 Stovall Street
Alexandria, VA 22332

Internal Distribution:

Reference Copy:
Unclassified Library

Record Copy:
Originating Office (CSCA-SPC)

GLOSSARY

ABBREVIATIONS, ACRONYMS, AND SHORT TERMS

| | |
|---------|--|
| A-AF | Army-Air Force |
| AF | Air Force |
| AFCSA | Air Force Center for Studies and Analysis |
| AO | area of operations |
| AOR | area of responsibility |
| AR | Army Regulation |
| ASD | Assistant Secretary of Defense |
| AVN | aviation |
| AWC | U.S. Army War College |
| BBS | Combat Sim |
| BN | battalion |
| CA | civil affairs |
| CAA | U.S. Army Concepts Analysis Agency |
| CAC | Combined Arms Command, Conflict Analysis Center |
| CAC-T | Combined Arms Command-Training |
| CASCON | Computer Assisted Simulation of Conflict |
| CBS | Corps Battle Simulation |
| CD | counter-drug |
| CDR | commander |
| CFAW | Contingency Force Analysis Wargame |
| C&GSC | U.S. Army Command and General Staff College |
| CIA | Central Intelligence Agency |
| CINC | Commander-in-Chief |
| CINCSO | Commander-in-Chief, Southern Command |
| CINCSOC | Commander-in-Chief, Special Operations Command |
| CLIC | Army-Air Force Center for Low Intensity Conflict |

| | |
|---------|--|
| CMO | civil-military operations |
| CMOTF | civil-military operations task force |
| COIN | counterinsurgency |
| CONOPS | contingency operations |
| CT | Country Team, combatting terrorism, counterterrorism |
| C3I | command, control, communications, and intelligence |
| DA | Department of the Army |
| DEA | Drug Enforcement Administration |
| DIA | Defense Intelligence Agency |
| DLEA | drug law enforcement agency |
| DOD | Department of Defense |
| DOM REP | Dominican Republic |
| DSN | Defense Switching Network (AUTOVON) |
| EWA | Electronic Warfare Associates |
| FBI | Federal Bureau of Investigation |
| FID | foreign internal defense |
| FM | field manual |
| FY | fiscal year |
| GIC | generic instability category |
| HIC | high intensity conflict |
| HQDA | Headquarters, Department of the Army |
| ICAN | Integrated Cost and Need |
| IDAD | Internal Defense and Development |
| IN | insurgency |
| IPB | intelligence preparation of the battlefield |
| ITAC | Intelligence and Threat Analysis Center |
| I2 | instability indicators |

| | |
|-------------------|---|
| JCS | Joint Chiefs of Staff |
| JESS | Joint Exercise Support System |
| JSOAP | Joint Special Operations Awareness Program |
| JSOTF | Joint Special Operations Task Force |
| JTF | Joint Task Force |
| JTLS | Joint Theater Level Simulation |
| J-8 | Force Structure, Resource, and Assessment Directorate, Joint Chiefs of Staff |
| LAS | LIC Assessment Study |
| LATAM | Latin America |
| LCDR | Lieutenant Commander |
| LFA | LIC functional area |
| LIC | low intensity conflict |
| LICAWS | Low Intensity Conflict Analysis Workshop |
| LICGS | Low Intensity Conflict Gaming System |
| LI ² S | LIC Instability Indicators Study |
| LOC | LIC operational category |
| LPCS | LIC Planning and Considerations Study |
| MACOM | Major Army Command |
| MAPP | Modern Aids to Planning Program |
| MFP | Major Force Program |
| MI | Military Intelligence |
| MOE | measures of effectiveness |
| MP | Military Police |
| NCA | National Command Authority |
| NCO | noncommissioned officer |
| NDU | National Defense University |
| NEO | Noncombatant Evacuation Order |

| | |
|---------|--|
| NGB | National Guard Bureau |
| NSC | National Security Council |
| NSDD | National Security Decision Directive |
| NXG | Next Game |
| OASD | Office of the Assistant Secretary of Defense |
| ODCSINT | Office of the Deputy Chief of Staff for Intelligence |
| ODCSLOG | Office of the Deputy Chief of Staff for Logistics |
| ODCSOPS | Office of the Deputy Chief of Staff for Operations and Plans |
| ODCSPER | Office of the Deputy Chief of Staff for Personnel |
| OPCON | operational control |
| OPLAN | operations plan |
| ops | operations |
| OPSEC | operations security |
| ORSA | Operations Research / Systems Analysis |
| PA | public affairs |
| PAM | pamphlet |
| PANTHER | Low Intensity Conflict Simulation |
| PKO | peacekeeping operations |
| PMAD | Political-Military Assessment Division |
| POC | point of contact |
| POL-MIL | political-military |
| PSYOPS | psychological operations |
| Pub | publication |
| R&D | research and development |
| RDSS | Regional Development Simulation System |
| RGR | ranger |
| RGT | regiment |

| | |
|----------------------------|---|
| ROE | rules of engagement |
| SECDEF | Secretary of Defense |
| SEES 1.1 | Security Exercise Evaluation Simulation Version 1.1 |
| SLIC | A Simple Low-Intensity Conflict Assessment Model |
| SO | special operations |
| SOAR | Special Operations Aviation Regiment |
| SOF | special operations forces |
| SOPARS | Special Operations Planning & Rehearsal System |
| SOFSIM | SOF Simulations Working Group |
| SO/LIC | special operations/low intensity conflict |
| SOMIC | Special Operations Mission Integration Capability |
| SOTACA | State of the Art Contingency Analysis |
| SOUTHCOM | U.S. Southern Command |
| SWC | Scenarios and Wargaming Center |
| T | task |
| TBP | to be published |
| TC | task category |
| TRAC | TRADOC Analysis Commnd |
| TRADOC | U.S. Army Training and Doctrine Command |
| U.S./US | United States |
| USACAPOC/ USACAPSYOPCOM | U.S. Army Civil Affairs and Psychological Operations Command |
| USACE | U.S. Army Corps of Engineers |
| USAI | U.S. Information Agency |
| USAID | U.S. Agency for International Development |
| USAJFKSWC | U.S. Army John F. Kennedy Special Warfare Center |
| USARPAC | U.S. Army Pacific Command |

| | |
|---------------------|--------------------------------------|
| USASFC/ USASFCOM | U.S. Army Special Forces Command |
| USASOC | U.S. Army Special Operations Command |
| USCINCPAC | U.S. Commander-in-Chief, Pacific |
| USG | U.S. Government |
| USMC | U.S. Marine Corps |
| USSOCOM | U.S. Special Operations Command |
| WG | working group |
| WGSC | Wargaming and Simulation Center |